August 1974 Number 360-Part II

Solar-Geophysical Data comprehensive reports

Data for February 1974–January 1974
& Miscellanea

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Solar - Geophysical Data

NO. 360 AUGUST 1974

Part II (Comprehensive Reports)

DATA FOR
FEBRUARY 1974
JANUARY 1974
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
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SOLAR - GEOPHYSICAL DATA

No. 360

Issued in two parts

Hope I. Leighton, Editor

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Solar - Terrestrial Data Services Division

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

Hα SOLAR FLARES
Confirmed
FEBRUARY 1974

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE 1974 FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H α	MAX. INT. %	
GRP50447	01	1625	1643	1627	S02	W47	.732	12716	29.2	18	--F		C		.46				2 2 2 3
BOUL	01	1624	1647	1627	S01	W46	.721	12716	29.2	23	-F		C	1627	.54	.77			
RAMY	01	1625	1638	1627	S03	W47	.731	12716	29.2	13	-F	3	C		.37				DE
448 BOUL	03	1800	1815	1802	N08	W33	.585	12731	1.3	15	--F		C	1802	.21	.25			3
	05	2153	2211	NO FLARE PATROL															
449 PALE	06	2058	2116	2058	S18	E18	.360	12734	8.2	18	--F	3	C		.13				3
451 ARCE	07	0830E	0900D		N08	E82	.993	12740	13.5	30D	--F		C	0840	.15				5
	07	2335	2343	NO FLARE PATROL															
454 CATA	08	1245E	1250D	1245	S16	E75	.961	12742	14.2	5D	--N	3		1245	.29			(191)	2
455 HUAN	08	1619	1624	1620	S13	E74	.956	12742	14.2	5	--F	1	C	1620	.21				D 3
	08	2126	2140	NO FLARE PATROL															
GRP50458	09	0251	0303	0253	S18	E71	.939	12742	14.4	12	-B				.96				2 2 2 3
PALE	09	0251	0307	0252	S20	E69	.928	12742	14.3	16	-B	3	C		.81				DE
VORO	09	0251	0258	0253	S16	E73	.951	12742	14.6	7	1B		C	0253	1.11	2.20		88	E
459 TEHR	09	0538	0548	0540	S16	E66	.908	12742	14.2	10	-N	1	C		.55				DE 3
GRP50460	09	0712	0729	0715	S18	E68	.921	12742	14.4	17	-N				.79				2 2 2 4
MANI	09	0711	0736D	0714	S19	E69	.928	12742	14.5	25D	-N	2		0714	.93	1.96			
TEHR	09	0713	0722	0715	S16	E66	.908	12742	14.3	9	-N	1	C		.64				DE
GRP50463	09	1038	1041	1035	S17	E67	.915	12742	14.5	11	--F				.20				2 2 2 3
TEHR	09	1038	1041	1034	S16	E66	.908	12742	14.4	11	-F	2	C		.19				DE
MONT	09	1035E	1040	1035	S18	E67	.915	12742	14.5	5D	-N		C	1035	.21				D
GRP50465	10	0946	1002	0950	N08	E36	.626	12748	13.1	16	--N				.35				2 2 2 4
ATHN	10	0946	1001	0950	N07	E36	.621	12748	13.1	15	-N	3	C		.50				DE
TEHR	10	0946	1003	0950	N09	E35	.618	12748	13.0	17	-N	2	C		.19				F
467 BOUL	10	1648	1655	1650	S15	E53	.795	12742	14.7	7	--F		V	1650		.60			2
	10	1657	1703	NO FLARE PATROL															
	10	2322	2323	NO FLARE PATROL															
468 PALE	10	2327E	2358	2330	S17	E45	.709	12742	14.4	31D	--F	2	V		1.03				DE 2
	11	1939	1942	NO FLARE PATROL															
GRP50470	11	2010	2102	2015	S10	E28	.468	12742	13.9	52	-F				1.98				2 2 2 3
PALE	11	2010E	2041	2015U	S12	E27	.457	12742	13.9	31D	-F	3	V		1.55				F
BOUL	11	2010	2122	2015	S07	E28	.466	12742	13.9	72	1F		V	2030	2.40	2.70			
472 ATHN	12	1329	1338D	1337	S10	E20	.343	12742	14.1	9D	--F	3	C		.33				DE 4
GRP50474	12	1830	1906	1841	S18	E23	.424	12742	14.5	36	--F				.32				2 2 2 4
BOUL	12	1824	1930	1843	S19	E24	.444	12742	14.6	66	-F		C	1843	.43	.47			
PALE	12	1835	1842	1839	S17	E22	.404	12742	14.4	7	-N	2	V		.21				M
	13	0255	0309	NO FLARE PATROL															
	13	0531	0605	NO FLARE PATROL															
	13	0925	0930	NO FLARE PATROL															
	13	0935	0950	NO FLARE PATROL															
	13	1000	1038	NO FLARE PATROL															
GRP50476	13	1038	1050	1044	S20	E20	.399	12742	14.9	12	-N				1.44				2 2 2 2
MONT	13	1038E	1044D	1038	S19	E19	.378	12742	14.9	6D	1N		C	1038	2.58				
CATA	13	1045E	1050D	1050	S20	E20	.399	12742	14.9	5D	-N	1		1050	.29	.31		(151)	
	13	1044	1045	NO FLARE PATROL															
	13	1050	1115	NO FLARE PATROL															
477 ATHN	13	1053E	1102D	1053U	S21	E18	.383	12742	14.8	9D	1N	1	C		2.48				U F 2
478 ATHN	13	1053E	1102D	1053U	S18	E74	.955	12747	19.8	9D	--F	1	C		.50				DE 2

Hα SOLAR FLARES
Confirmed
FEBRUARY 1974

OBSERV-ATORY	OBSERVED UT				LOCATION						DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
479 ATHN	13	1853E	1102D	1053U	S10	W01	.860	12739	13.4		9D	--F	1	C		.33				DE 2
	13	1951	1958	NO FLARE PATROL																
480 BOUL	13	2015	2035D	2020	S17	E71	.939	12747	19.2		20D	-N		C	2020	.43	1.18			1
	13	2048	2117	NO FLARE PATROL																
	13	2152	2205	NO FLARE PATROL																
	14	0630	0651	NO FLARE PATROL																
	14	0700	0705	NO FLARE PATROL																
	14	0900	0950	NO FLARE PATROL																
	14	0954	1011	NO FLARE PATROL																
	14	1036	1127	NO FLARE PATROL																
GRP50481	14	2027	2046	2030	S13	W36	.587	12749	12.2		19	--F				.59				2 2 2 3
BOUL	14	2026	2048	2030	S13	W35	.574	12749	12.2		22	-F		C	2030	.54	.66			
PALE	14	2027	2043	2029	S12	W36	.586	12749	12.2		16	-F	3	C		.63				U F
482 PALE	14	2051	2055	2053	S16	W39	.633	12749	11.9		4	--F	3	C		.19				3
483 BOUL	14	2141	2215D	2155	S12	W40	.640	12749	11.9		34D	--F		C	2155	.86	1.12			3
GRP50484	14	2257	2316	2305	S13	W41	.654	12749	11.9		19	--F				.32				2 2 2 2
BOUL	14	2251	2316	2305	S12	W39	.627	12749	12.0		25	-F		C	2305	.32	.41			
MANI	14	2302	2314D	2304	S13	W43	.679	12749	11.7		12D	-N	1		2304	.31	.43			
485 PALE	15	0111E	0111D	0111U	S19	E42	.677	12752	18.2			--F	2	C		.19				F 1
	15	0115	0158	NO FLARE PATROL																
	15	0200	0229	NO FLARE PATROL																
	15	0310	0330	NO FLARE PATROL																
	15	0635	0700	NO FLARE PATROL																
GRP50486	15	0948	1000	0955	S14	W52	.783	12749	11.5		12	-B				.88				2 2 2 4
ARCE	15	0940E	1000D		S14	W53	.794	12749	11.4		20D	-N		C	0953	.89	1.40			F
CATA	15	0955	0955D	0955	S13	W51	.772	12749	11.6			-B	1		0955	.87	1.36		(20%)	
487 MONT	15	1111	1116	1113	S13	W44	.691	12749	12.2		5	--N		C	1113	.21				D 3
488 MONT	15	1133	1139	1136	S13	W50	.761	12749	11.7		6	--N		C	1136	.52				2
GRP50489	15	1508	1539	1511	S12	W51	.772	12749	11.8		31	-N				.88				2 2 2 2
RAMY	15	1505E	1535	1507U	S11	W51	.772	12749	11.8		30D	-N	4	V		1.29				DE
MCMA	15	1511	1542	1514	S12	W51	.772	12749	11.8		31	-N		C	1514	.31	.50			E
490 MCMA	15	1638	1646	1641	S19	E33	.564	12752	18.2		8	--N		C	1641	.26	.30			D 2
GRP50491	15	1809	1850	1820	S12	W52	.783	12749	11.9		41	-N				.68				2 2 2 3
PALE	15	1756	1853D	1807	S11	W51	.772	12749	11.9		57D	-N	2	C		.55				DE H
PALE	15	1803E	1844D	1822	S12	W50	.761	12749	12.0		41D	-B	3	V		.83				DE H
PALE	15	1803E	1844D	1807	S12	W50	.761	12749	12.0		41D	-N	3	V		.62				DE H
MCMA	15	1814	1848	1818	S12	W53	.793	12749	11.8		34	-F		C	1818	.52	.80			E
492 PALE	15	1834	1851	1843	S19	E32	.551	12752	18.2		17	--F	2	C		.27				F 3
493 MCMA	15	1908	1916	1912	S19	E30	.524	12752	18.0		8	--F		C	1912	.41	.50			E 3
GRP50494	15	1959	2014	2007	S12	W55	.813	12749	11.7		15	--F				.42				2 2 2 4
MCMA	15	1959	2011	2003	S12	W54	.803	12749	11.8		12	-N		C	2003	.52	.90			DH
BOUL	15	2005E	2017	2010	S12	W55	.813	12749	11.7		12D	-F		C	2010	.32	.56			
GRP50495	16	0259	0320	0309	S14	W59	.851	12749	11.7		21	-N				.82				2 2 2 4
PALE	16	0259	0320	0308	S15	W57	.833	12749	11.8		21	-N	3	C		.81				F
MANI	16	0310E	0313D	0310U	S12	W60	.860	12749	11.6		30	-N	1		0310	.83	1.50			HF
GRP50496	16	0610	0837	0616	S12	W60	.860	12749	11.8		14?	-F				1.21				2 2 2 3
MANI	16	0609E	0618D	0615U	S12	W60	.860	12749	11.8		90	-F	2		0615	.62	1.13			F
ABST	16	0611	0855	0616	S11	W60	.860	12749	11.8		164	1N		C	0616	1.79	3.40		6%	EKWZ
MANI	16	0813E	0819	0814U	S12	W61	.869	12749	11.8		6D	-F	2		0814	.62	1.15			F

Hα SOLAR FLARES
Confirmed
FEBRUARY 1974

OBSERV-ATORY	OBSERVED UT				LOCATION						DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		CONG.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
497 ABST	16	0644	0705	0653	S16	E38	.619	12747	19.1		21	--F		C	0653	.90	1.10		50	D 2
498 RAMY	16	1646	1657	1648	S14	W66	.907	12749	11.7		11	--F	4	C		.28				DE 1
499 HUAN	16	1743	1747		S13	W67	.914	12749	11.7		4	--F	1	C	1744					2
500 HUAN	16	1747	1748D		S19	E19	.376	12752	18.2		1D	--F	1	P	1748	.36	.39			E 2
501 PALE	16	1930E	1957	1936	S13	W66	.907	12749	11.9		27D	--F	3	C		.27				F 3
GRP50502	16	1947	2015	1953	S19	E17	.350	12752	18.1		28	-N				1.06				2 2 2 3
HUAN	16	1946	2012D	1954U	S18	E17	.341	12752	18.1		26D	-N	1	C	1954	.93	.99			E
PALE	16	1947	2015	1952	S19	E16	.338	12752	18.0		28	-N	4	C		1.18				DE
GRP50503	16	2108	2117	2110	S13	W68	.921	12749	11.8		9	--N				.36				2 2 2 2
PALE	16	2108	2117	2110	S13	W68	.921	12749	11.8		9	-N	3	C		.45				DE
HUAN	16	2108	2116D	2110	S13	W67	.914	12749	11.9		8D	-N	1	P	2110	.26				D
GRP50504	16	2154	2215	2201	S13	W68	.921	12749	11.8		21	--F				.32				3 3 3 3
PALE	16	2153	2207D	2159	S13	W68	.921	12749	11.8		14D	-F	3	C		.27				F
HUAN	16	2154	2208D	2202	S13	W67	.914	12749	11.9		14D	-N	1	P	2202	.26				D
BOUL	16	2155	2215	2203	S13	W68	.921	12749	11.8		20	-F		C	2203	.43	1.09			
	16	2224	2232	NO FLARE PATROL																
505 PALE	16	2232E	2237D	2233U	S13	W74	.956	12749	11.4		5D	--F	1	V		.41				DE 1
	16	2237	2244	NO FLARE PATROL																
	16	2250	2257	NO FLARE PATROL																
507 ABST	17	0609	0635	0613	S16	E07	.197	12752	17.8		26	--F		C	0613	.45	.50		60	D 4
GRP50508	17	0756	0812	0801	S17	E09	.231	12752	18.0		16	--N				.92				3 3 3 4
ABST	17	0754	0820	0802	S17	E08	.221	12752	17.9		26	-N		C	0802	1.79	1.80		85	EK
TEHR	17	0755	0810	0800	S18	E10	.255	12752	18.1		15	-N	2	C		.36				F
MANI	17	0759	0807	0801	S17	E09	.231	12752	18.0		8	-N	2		0801	.62	.64			E
	17	1730	1745	NO FLARE PATROL																
	17	1902	2037	NO FLARE PATROL																
513 PALE	17	2243	2313	2253	S18	W51	.775	12742	14.1		30	-N	3	C		.55				F H 2
GRP50515	18	1224	1255	1228	S18	W08	.234	12752	17.9		31	--N				.44				2 2 2 3
RAMY	18	1224	1259D	1226	S17	W08	.221	12752	17.9		35D	-N	3	C		.37				DE
ATHN	18	1226E	1250	1229	S18	W08	.234	12752	17.9		24D	-N	4	V		.50				DE
	18	1415	1421	NO FLARE PATROL																
516 RAMY	18	1509	1519	1511	S18	W13	.289	12752	17.7		10	--F	4	C		.21				DE 1
517 BOUL	18	1527	1540	1529	S17	W60	.860	12742	14.1		13	--F		C	1529	.43	.86			2
518 BOUL	18	1558	1613	1600	S15	W11	.233	12752	17.8		15	--F		C	1600	.43	.44			3
519 BOUL	18	1620	1632D	1624	S15	W11	.233	12752	17.9		12D	--F		C	1624	.43	.44			3
520 BOUL	18	1622E	1632D	1623	S17	W60	.860	12742	14.2		10D	--F		C	1623	.54	1.07			3
GRP50521	18	1820	1833	1823	S18	W62	.877	12742	14.1		13	-N				.94				3 3 3 3
RAMY	18	1820	1832	1821	S18	W63	.885	12742	14.0		12	-N	4	C		.74				DE
PALE	18	1821E	1833	1822	S18	W62	.877	12742	14.1		12D	1B	3	C		1.44				F H
BOUL	18	1825E	1835	1825E	S17	W62	.877	12742	14.1		10D	-N		C	1825	.64	1.39			
523 HUAN	18	1915	1919	1918	S18	W07	.225	12752	18.3		4	--F	1	C	1918	.36	.37			3
524 PALE	18	2343E	0004	2350U	S18	W12	.277	12752	18.1		21D	--F	3	C		.36				DE 2
	19	0044	0049	NO FLARE PATROL																
	19	0109	0253	NO FLARE PATROL																
525 PALE	19	0302	0316D	0304	S18	W65	.900	12742	14.3		14D	--N	3	C		.19				DE 2
	19	0324	0333	NO FLARE PATROL																
	19	0340	0352	NO FLARE PATROL																

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	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	19	0412	0546	NO FLARE PATROL																
	19	0548	0555	NO FLARE PATROL																
526 ABST	19	0559	0610	0603	S18	W12	.277	12752	18.3		11	--N		C	0603	.90	.98		75	DMZ 1
	19	0930	1025	NO FLARE PATROL																
	19	1030	1145	NO FLARE PATROL																
	19	1149	1155	NO FLARE PATROL																
	19	1205	1240	NO FLARE PATROL																
	19	1304	1310	NO FLARE PATROL																
	19	1406	1436	NO FLARE PATROL																
GRP50527	19	1548	1555	1550	S18	W17	.340	12752	18.4		7	--F				.42				2 2 2 2
RAMY	19	1548	1555	1549	S17	W17	.332	12752	18.4		7	-F	4	C		.37				DE
HUAN	19	1549E	1551D	1550	S18	W17	.340	12752	18.4		20	-F	1	P	1550	.46	.50			
GRP50528	19	1808	1822	1814	S20	W20	.396	12752	18.3		14	--N				.38				3 3 3 3
BOUL	19	1802	1807	1807	S20	W20	.396	12752	18.3		5	-F		C	1807	.21	.23			
PALE	19	1805E	1829	1815	S20	W20	.396	12752	18.3		240	-N	3	C		.19				DE
RAMY	19	1818	1830	1820	S21	W20	.405	12752	18.3		12	-N	4	C		.74				DE
529 PALE	19	2139E	2150	2140	S20	W22	.422	12752	18.3		110	--F	1	C		.19				DE 1
	19	2150	2218	NO FLARE PATROL																
	19	2221	2255	NO FLARE PATROL																
530 MANI	19	2304E	2312	2305U	S19	W22	.415	12752	18.3		80	--B	1		2305	.62	.68			1
531 MANI	20	0359	0421D	0402	S17	W32	.542	12752	17.8		220	-N	2		0402	.83	.98			2
	20	0423	0520	NO FLARE PATROL																
	20	0532	0545	NO FLARE PATROL																
GRP50533	20	0659	0713	0706	S18	W28	.491	12752	18.2		14	-F				2.12				2 2 2 4
MANI	20	0657	0714	0706	S17	W28	.486	12752	18.2		17	-N	2		0706	1.55	1.77			HF
ABST	20	0700	0712	0706	S16	W26	.454	12752	18.3		12	1F		C	0706	1.79	2.10		44	EHZ
ABST	20	0702	0720	0709	S21	W29	.520	12752	18.1		18	-F		C	0709	.90	1.00		54	D
GRP50534	20	0900	0921	0904	S17	W27	.472	12752	18.4		21	--N				.63				4 4 4 5
ABST	20	0900	0915	0904	S16	W27	.468	12752	18.4		15	-F		P	0904	.90	1.00			EZ
ARCE	20	0900E	0919		S16	W28	.482	12752	18.3		190	-N		C	0905	.63	.70			
CATA	20	0900	0930	0905	S17	W27	.472	12752	18.4		30	-N	3		0905	.58	.65		(166)	
MONT	20	0901	0905D	0902	S17	W27	.472	12752	18.4		40	-N		C	0902	.41				
GRP50535	20	1045	1130	1050	S17	W28	.486	12752	18.3		45	--N				.58				2 1 1 3
CATA	20	1045	1130D	1050	S17	W28	.486	12752	18.3		45D	-N	3		1050	.58	.66		(151)	
MONT	20	1113	1136	1120	S17	W28	.486	12752	18.4		23	-N		C	1120	.21				D
536 MONT	20	1207	1224	1216	S17	W28	.486	12752	18.4		17	--N		C	1216	.31				E 3
	20	1250	1308	NO FLARE PATROL																
537 MCMA	20	1308E	1315		S18	W30	.518	12752	18.3		70	--F		C	1308	.62	.70			B 1
538 MCMA	20	1330	1500D	1333	S18	W30	.518	12752	18.3		90D	--N		C	1333	.36	.40			EHK 1
GRP50539	20	1514	1533	1516	S18	W31	.532	12752	18.3		19	-B				1.68				2 2 2 3
RAMY	20	1513	1531	1516	S17	W30	.514	12752	18.4		18	1B	3	W		2.06				DE
MCMA	20	1514	1535	1516	S18	W31	.532	12752	18.3		21	-B		C	1516	1.29	1.50			EH
540 MCMA	20	1658	1720	1706	S18	W32	.545	12752	18.3		22	--F		C	1706	.46	.50			EH 1
	20	2037	2047	NO FLARE PATROL																
GRP50541	20	2319	2343	2322	S19	W38	.627	12752	18.1		24	-B				1.10				3 2 2 4
VORO	20	2319	2341	2321	S20	W37	.617	12752	18.2		22	-B		C	2321	.93	1.20		86	EJ
PALE	20	2322E	2335D	2322U	S17	W38	.621	12752	18.1		130	-N	3	C		1.27				DE
MANI	20	2340E	2343D	2340U	S18	W37	.611	12752	18.2		30	1N	2		2340	2.06	2.62			F

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	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	MAX. INT. %	
GRP50542	21	0043	0057	0050	S18	W37	.611	12752	18.3	14	--N				.49				2 2 2 4
MANI	21	0043	0057	0050	S18	W37	.611	12752	18.3	14	-N	2		0050	.52	.66			
PALE	21	0049E	0050D	0050U	S17	W36	.595	12752	18.3	10	-N	3	C		.45				F
4 STATIONS REPORTING GROUP 50546. 0 STATIONS OBSERVING AND NOT REPORTING.																			
GRP50546	21	1306	1345	1314	S18	W44	.697	12752	18.2	39	-N				1.20				3 3 3 3
TEHR	21	1306	1341	1314	S18	W42	.673	12752	18.4	35	-N	2	C		1.00				F
ATHN	21	1311E	1342	1314	S18	W46	.720	12752	18.1	31D	-B	3	V		1.49				F
RAMY	21	1312E	1351	1315	S17	W45	.707	12752	18.2	39D	-N	4	C		1.11				F
50546	21	1314	1353	1324	S18	W48	.743	12752	18.0	39	*-N				1.13				3 3 3 4
RAMY	21	1312E	1351	1331	S17	W45	.707	12752	18.2	39D	-N	4	C		1.30				F
ATHN	21	1316	1354	1322	S18	W51	.775	12752	17.7	38	-N	3	V		.83				DE
CATA	21	1320E	1340D	1320	S18	W45	.709	12752	18.2	20D	-N	3		1320	.87	1.23		(186)	
CATA	21	1325	1340D	1325	S18	W52	.785	12752	17.7	15D	-N	3		1325	.40	.65		(162)	
547 BOUL	21	1636	1726	1646	S17	W46	.719	12752	18.2	50	--F		C	1646	.75	1.08			2
GRP50548	21	1816	1824	1816	S17	W43	.683	12752	18.5	8	--F				.40				3 3 2 5
BOUL	21	1751	1817	1812	S17	W43	.683	12752	18.5	26	-F		C	1810	.43	.59			
RAMY	21	1812	1834	1815U	S17	W42	.671	12752	18.6	22	-F	2	C		.37				DE H
HUAN	21	1819	1821	1820	S18	W43	.685	12752	18.5	2	-F	1	C	1820					
GRP50549	21	1824	1846	1830	S18	W44	.697	12752	18.5	22	--F				.42				2 2 2 5
BOUL	21	1820	1900	1829	S17	W44	.695	12752	18.5	40	-F		C	1829	.32	.45			
HUAN	21	1828	1831	1830	S18	W43	.685	12752	18.5	3	-F	1	C	1830	.52	.70			E
551 BOUL	21	2038	2051	2044	S18	W51	.775	12752	18.0	13	--F		C	2044	.32	.51			3
GRP50552	21	2125	2132	2127	S17	W50	.763	12752	18.1	7	--F				.37				2 2 2 3
BOUL	21	2124	2132	2127	S17	W49	.753	12752	18.2	8	-F		C	2127	.21	.32			
PALE	21	2125	2131	2127	S17	W51	.774	12752	18.1	6	-F	3	C		.45				F
PALE	21	2126E	2130	2127	S18	W50	.765	12752	18.1	4D	-F	2	V		.52				DE
554 ABST	22	0758	0820	0802	S16	W58	.842	12752	18.0	22	--F		C	0802	.90	1.60			E 4
556 HONT	22	0908	0915	0911	S17	W57	.833	12752	18.1	7	--F		C	0911	.31				2
557 HONT	22	1118	1124	1119	S17	W58	.842	12752	18.1	6	--N		C	1119	.41				4
558 HUAN	22	1426	1432	1428	S15	W42	.668	12747	19.5	6	--F	1	C	1428	.21	.28			D 2
559 HUAN	22	1436	1455	1440	S18	W57	.834	12752	18.3	19	--N	2	C	1440	.46	.83			E 2
GRP50560	23	0141	0204	0143	N10	E68	.939	12768	28.2	23	--F				.55				2 1 1 4
PALE	23	0141	0204	0143	N10	E68	.939	12768	28.2	23	-F	3	C		.55				F
MANI	23	0158	0211	0159	N12	E65	.923	12768	28.0	13	-F	2		0159	.21	.42			
GRP50561	23	0631	0653	0636	S16	W55	.814	12747	19.1	22	--F				.71				2 2 2 3
MANI	23	0628	0645	0634	S17	W54	.805	12747	19.2	17	-F	2		0634	.52	.86			F
ABST	23	0634	0700	0637	S15	W55	.813	12747	19.1	26	-N		C	0637	.90	1.50			OK
562 ABST	23	0705	0745	0707	S16	W53	.794	12747	19.3	40	1F		C	0707	1.35	2.20		56	EK 2
	23	1200	1230	NO FLARE PATROL															
	23	1430	1440	NO FLARE PATROL															
	23	1803	1810	NO FLARE PATROL															
564 BOUL	23	1943	1949	1945	N15	E59	.887	12768	28.2	6	--F		C	1945	.32	.63			3
565 BOUL	23	2133	2145D	2137	S16	W60	.860	12747	19.4	12D	--F		C	2137	.21	.43			1
	23	2140	2153	NO FLARE PATROL															
	23	2155	2205	NO FLARE PATROL															
	23	2207	2251	NO FLARE PATROL															
GRP50566	23	2257	2300	2258	S17	W60	.860	12747	19.5	3	-B				.59				2 2 2 3
VORO	23	2257E	2300		S18	W60	.860	12747	19.5	3D	-B		C	2258	.46	.90		72	CDJ
PALE	23	2257E	2258D	2258U	S16	W60	.860	12747	19.5	1D	-N	2	V		.72				DE
GRP50567	23	2331	2338	2332	S17	W61	.868	12747	19.4	7	-N				.47				3 3 3 3
PALE	23	2330	2336D	2332	S15	W60	.859	12747	19.5	6D	-N	2	C		.55				F
VORO	23	2331	2335	2332	S19	W61	.869	12747	19.4	4	-B		C	2332	.46	.90		66	EJ
MANI	23	2332E	2344	2332U	S16	W61	.868	12747	19.4	12D	-N	2		2332	.41	.76			F

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	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
569 MANI	24	0554E	0606D	0554U	S18	W88	.979	12752	18.2	120	-N	2		0554	.41	1.88			2
570 MANI	24	0605E	0606D	0605U	S17	W66	.906	12747	19.3	10	--F	2		0605	.21	.42			2
	24	0639	0645	NO FLARE PATROL															
572 ABST	24	0658	0720	0702	S18	W88	.997	12752	17.7	22	1N		C	0702	.98			64	E 2
	24	0830	0854	NO FLARE PATROL															
	24	1815	1835	NO FLARE PATROL															
	24	1225	1250	NO FLARE PATROL															
GRPS0574	24	1403	1412	1408	S15	W69	.927	12747	19.4	9	-N				.59				5 5 4 5
BOUL	24	1356	1414	1409	S14	W71	.939	12747	19.3	18	1N		C	1409	.75	2.07			
RAMY	24	1359	1413	1407	S16	W67	.913	12747	19.6	14	-N	3	C		.46				DE
LOCA	24	1405	1413	1407	S15	W67	.914	12747	19.6	8	-N		V	1407	.63	1.40			
HUAN	24	1406	1410	1408	S14	W69	.927	12747	19.4	4	-N	2	C	1408	.52				
MEUD	24	1407	1411	1408	S15	W70	.933	12747	19.3	4	-N		C						
RAMY	24	1407E	1413	1410U	S17	W66	.906	12747	19.6	60	-N	4	V		.37				DE
576 PALE	24	2005	2013	2007	S14	W72	.945	12747	19.4	8	--F	2	C		.27				3
577 PALE	24	2315E	2317D	2315U	S17	W90	.999	12752	18.2	20	--F	2	C		.19				4
	25	0304	0312	NO FLARE PATROL															
	25	0317	0328	NO FLARE PATROL															
	25	0334	0357	NO FLARE PATROL															
582 MANI	25	0357E	0401D	0357U	S16	W80	.980	12747	19.2	40	--F	1		0357	.62	1.59			F 1
	25	0401	0405	NO FLARE PATROL															
	25	0507	0553	NO FLARE PATROL															
583 MANI	25	0744E	0755	0746U	S18	W84	.991	12747	19.0	110	--F	1		0746	.52	1.47			1
GRPS0584	25	0910	0916	0913	S17	W81	.983	12747	19.3	6	-N				.36				2 2 2 4
MANI	25	0909E	0915D	0913U	S17	W81	.983	12747	19.3	60	-N	2		0913	.41	1.10			
MEUD	25	0911	0916	0913	S17	W80	.980	12747	19.4	5	-N		C	0913	.31				D
585 MEUD	25	1033	1043	1037	S17	W88	.980	12747	19.4	10	--F		C	1037	.31				D 3
586 MCMA	25	1348	1352	1350	S21	W90	.999	12747	18.8	4	--F		C	1350					3
GRPS0587	25	1820	1838	1828	S17	W89	.999	12747	19.1	18	-N				.40				4 4 2 4
RAMY	25	1817	1837	1828	S17	W88	.998	12747	19.2	20	-N	3	C						DE
BOUL	25	1817	1843	1827	S17	W90	.999	12747	19.0	26	-N		C	1827	.43	1.78			
PALE	25	1821	1836	1826	S16	W90	.999	12747	19.0	15	-N	3	C		.36				
MCMA	25	1824	1837	1829	S16	W89	.999	12747	19.1	13	-F		C	1829					D
GRPS0588	25	1846	2002	1921	S16	W90	.999	12747	19.0	76	-N				.58				3 3 2 3
BOUL	25	1845	2012	1925	S17	W90	.999	12747	19.0	87	1N		C	1925	.75	3.11			
MCMA	25	1847	1904	1850	S16	W89	.999	12747	19.1	17	-N		C	1850					D
PALE	25	1852E	1953	1912U	S16	W90	.999	12747	19.0	610	-N	3	C						
MCMA	25	1908	2000	1925	S16	W89	.999	12747	19.1	52	-N		C	1925					D
PALE	25	1912E	1935D	1914	S15	W90	.999	12747	19.0	230	-N	3	V		.41				
	26	0414	0428	NO FLARE PATROL															
	26	0450	0809	NO FLARE PATROL															
591 PALE	26	2039	2053	2044	N07	E66	.923	12773	31.8	14	--F	2	C		.23				DE 1
	27	0455	0728	NO FLARE PATROL															
GRPS0592	27	1500	1512	1504	N06	E53	.814	12773	3.6	12	--F				.22				3 3 3 5
CATA	27	1500	1515	1505	N06	E52	.804	12773	31.5	15	-N	1		1505	.17	.29		(155)	
RAMY	27	1500	1512	1503	N08	E53	.819	12773	31.6	12	-F	3	C		.28				DE
HUAN	27	1505E	1510		N05	E54	.822	12773	31.7	50	-F	1	P	1506	.21	.34			D
GRPS0593	27	1747	1814	1750	N06	E56	.843	12773	3.9	27	--F				.42				2 2 2 3
HUAN	27	1747	1752D	1749	N05	E57	.850	12773	1.0	50	-F	1	P	1749	.21	.39			D
PALE	27	1749E	1814	1751U	N07	E55	.835	12773	31.9	250	-F	2	V		.62				DE
	27	1945	1950	NO FLARE PATROL															

Hα SOLAR FLARES
Confirmed
FEBRUARY 1974

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.	MEASUREMENTS					REMARKS
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND. TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
	27	2007	2011	NO FLARE PATROL														
	28	0508	0555	NO FLARE PATROL														
	28	0557	0604	NO FLARE PATROL														
	28	0614	0720	NO FLARE PATROL														
	28	0725	0735	NO FLARE PATROL														
594 HUAN	28	2023	2055	2032	N13	W13	.486	12768	27.9	32	--N	2 C	2032	.41	.45			3

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked assymetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

Note:
A line of explanation has been added before each flare event having more than one maxima. The total number of stations reporting some part of the event is given. The number of stations observing at the time of the principal maximum but not reporting the event is given in the second statement. Care should be exercised in utilizing the numbers in the remarks column. The first number is the number of stations reporting the individual maximum, and not the total number of stations reporting some part of the flare event. The last number is the number of stations reporting at the time of the individual maximum and not necessarily the total number of stations observing during the flare event. GRP numbers may appear several times in order to indicate secondary maxima. An asterisk beside an importance indicates a secondary maximum. The word "GRP" has also been omitted to aid in pointing to this condition.
When it is impossible to determine the time of Maximum Phase from the individual reports the time of Area Measurements is used. This time appears in parentheses. For Flares reported by only one station the last 3 digits of the group number appear to the left of the station code.

In the importance column "--" signifies the subflare has been confirmed by the NOAA grouping program but is not included in the I.A.U. Quarterly Bulletin on Solar Activity. These subflares are also not included in the Flare Index below.

DAILY FLARE INDICES

Date	Flare Index	HR OBS	Date	Flare Index	HR OBS	Date	Flare Index	HR OBS
740205	0.00	23.7	740214	0.00	21.6	740221	7.60	24.0
740207	0.00	23.9	740215	10.40	22.0	740223	12.66	22.1
740208	0.00	23.8	740216	17.21	23.6	740224	7.02	22.8
740209	9.75	24.0	740217	1.67	22.2	740225	3.30	22.5
740210	0.00	23.9	740218	4.66	23.9	740226	0.00	20.5
740211	20.69	24.0	740219	0.00	15.7	740227	0.00	21.4
740213	47.87	21.0	740220	50.28	22.4	740228	0.00	21.7

When no Flare Index is given, it is 0 for that day.

Errata: In the Hα Solar Flare tables for January 1974 reported in *Solar-Geophysical Data* Part II, pp 4-11, several McMath Plage Region numbers were replaced by Mt. Wilson Sunspot Region numbers. The following changes should be made:

Mt. Wilson No.	McMath Plage Region No.	Mt. Wilson No.	McMath Plage Region No.	Mt. Wilson No.	McMath Plage Region No.
19311	12686	19315	12703	19324	12694
19312	12694	19317	12706	19325	12708
19313	12702	19318	12700	19326	12703
19314	12703	19321	12706		

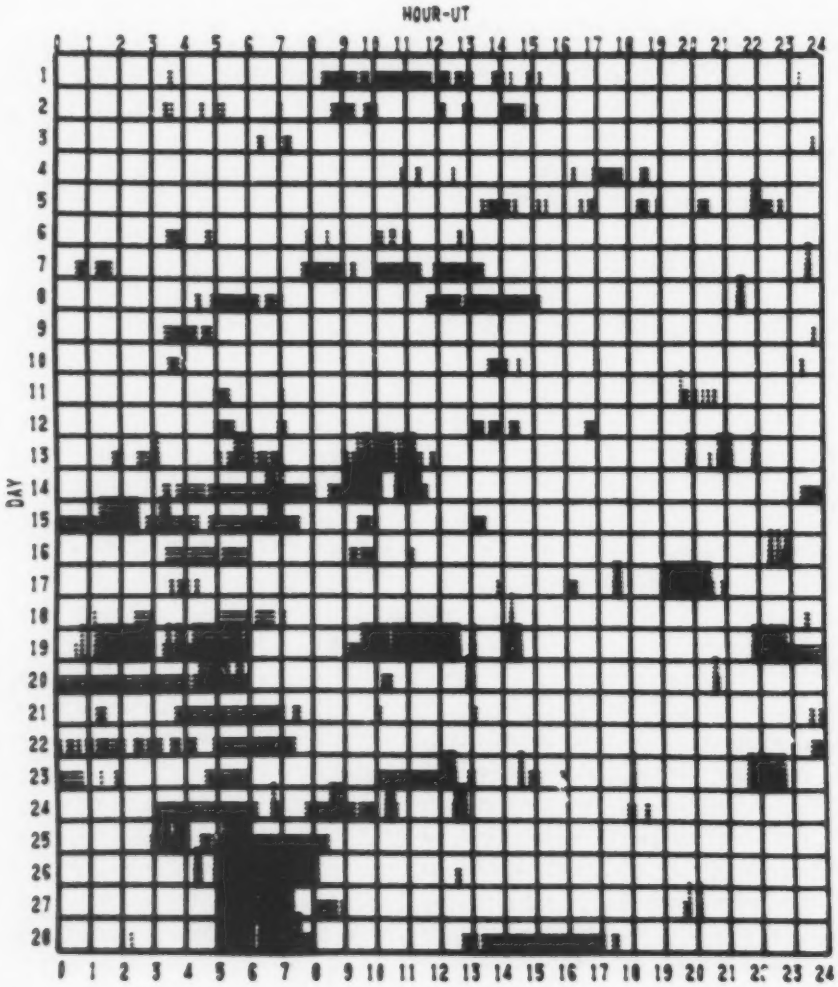
Hα SOLAR FLARES
Unconfirmed
FEBRUARY 1974

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IM-POR-TANCE	OBS.			MEASUREMENTS					REMARKS
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MONATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE		TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
450 PALE	07	0218E	0227	0220U	N09	E86	.999	12740	13.5	9D	-F	2	V			.36				4
452 MANI	08	0249E	0252D	0249U	S15	E84	.992	12742	14.4	3D	-N	2			0249	.31	.86			4
453 MANI	08	0624E	0635D	0624U	S15	E82	.987	12742	14.4	11D	-F	2			0624	.52	1.38			3
456 PALE	08	1840	1906	1841	S17	E74	.956	12742	14.3	26	-F	2	C			.36				DE 4
457 PALE	08	2017E	2031	2020	S17	E72	.945	12742	14.2	14D	-F	3	C			.19				F 5
461 MONT	09	0812E	0833	0816	S18	E68	.921	12742	14.4	21D	-N		C		0816	.31				6
462 MONT	09	0902	0912	0905	S18	E68	.921	12742	14.5	10	-N		C		0905	.21				DH 6
464 ATHN	10	0945	1003	0948	S25	E46	.739	12742	13.9	18	-F	3	C			.33				DE 4
466 ATHN	10	0950	1006	0955	S18	E51	.777	12742	14.2	16	-F	3	C			.33				DE 4
469 PALE	11	0035	0040	0036	S18	E47	.733	12742	14.5	5	-N	2	V			.21				DE 4
471 PALE	11	2231E	2240	2233U	S22	E38	.639	12742	14.8	9D	-F	3	V			.21				3
473 UPIC	12	1340E	1349		S09	E20	.341	12742	14.1	9D	-F		P		1340	.85				4
475 PALE	13	0201	0212	0203U	N08	W60	.880	12733	8.6	11	-F	3	V			.36				3
506 MANI	17	0524	0548	0536	S17	E11	.254	12752	18.1	24	-N	2			0536	1.65	1.71			F 3
509 ABST	17	0853	0921	0859	S17	E08	.221	12752	18.0	28	1N		C		0859	2.25	2.30		88	EK 4
510 MEUD	17	1111	1125	1112	S16	W49	.752	12742	13.8	14	-F		C		1112	.72	1.10			E 5
511 UPIC	17	1152E	1345U		S17	E07	.211	12752	18.0	113D	1F		P		1159	2.10				5
512 UPIC	17	1325E	1345U		S19	E21	.402	12747	19.1	20D	-F		P		1338	.63				3
514 MANI	18	0404E	0406D	0404U	S18	W54	.806	12742	14.1	2D	-F	2			0404	.52	.86			3
522 BOUL	18	1847	1903	1850	S13	W64	.892	12742	14.0	16	-F		C		1850	.11	.24			4
532 MANI	20	0609	0635	0620	S19	W32	.549	12752	17.9	26	-F	2			0620	.62	.75			4
543 MANI	21	0332E	0336	0332U	S18	W42	.673	12752	18.0	40	-F	2			0332	.31	.42			4
GRP50544	21	0803	0817	0812	S16	W44	.697	12752	18.0	14	-N					.52				2 2 2 7
ATHN	21	0758E	0809	0800	S18	W45	.709	12752	18.0	11D	-N	3	V			.50				DE
MONT	21	0807	0813	0810	S17	W42	.671	12752	18.2	6	-N		C		0810	.21				
ATHN	21	0810	0820	0813	S18	W48	.743	12752	17.7	10	-N	3	V			.83				F
545 ATHN	21	0822	0830	0824	S18	W42	.673	12752	18.2	8	-F	3	V			.33				DE 7
550 PALE	21	1902	1909	1905	S17	W44	.695	12752	18.5	7	-F	3	C			.45				DE 4
553 MANI	22	0047	0100	0050	S17	W46	.719	12752	18.6	13	-F	2			0050	.62	.91			HF 3
555 ABST	22	0826	0859	0829	S15	W40	.643	12747	19.4	33	1N		P		0829	1.79	2.40		76	EH 4
563 MANI	23	0818	0841	0824	S16	W56	.823	12747	19.1	23	-F	2			0824	.41	.70			3
568 MANI	24	0223E	0232D	0223U	S16	W62	.876	12747	19.4	9D	-F	2			0223	.31	.59			H 3
571 MANI	24	0625E	0628D	0625U	S18	W80	.979	12752	18.3	3D	-F	2			0625	.41	1.08			4
573 MANI	24	0732E	0744	0732U	S16	W71	.939	12747	19.0	12D	-N	1			0732	.31	.67			3
575 PALE	24	1835E	1840	1836U	S17	W71	.939	12747	19.4	5D	-F	3	V			.26				3
578 MANI	25	0014E	0020	0014U	S19	W80	.979	12747	19.0	6D	-N	2			0014	.21	.54			H 4
579 MANI	25	0027E	0055	0032	S16	W79	.976	12747	19.1	28D	-F	2			0032	.31	.80			4
580 MANI	25	0027E	0055	0040	S16	W79	.976	12747	19.1	28D	-F	2			0040	.31	.80			3
581 MANI	25	0050	0100	0056U	N15	E43	.744	12768	28.3	10	-F	2			0056	.31	.47			F 3
589 BOUL	25	2016	2126	2058	S17	W90	.999	12747	19.1	70	1N		C		2058	.54	2.22			4
590 BOUL	25	2250	2305	2301	S17	W90	.999	12747	19.2	15	-F		C		2301	.21	.89			4

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

FEBRUARY 1974



Observatories included in total patrol:

Abastumani	Carnarvon	Huancayo	Locarno	Palehua
Arcetri	Catania	Hubanovo	Manila	Ramey
Athenes	Culgoora	Kharkov	McMath-Hulbert	Teheran
Boulder	Gran Canaria	Kiev	Meudon	Upice
Bucharest	Herstmonceux	Kodaikanal	Mitaka	Voroshilov
			Monte Mario	Wendelstein

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

FEBRUARY 1974

FEB 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
1	9240	ARCE	23	0851.4	0946.4	125				
	18	MCMA	42	1252	1311.3	36			3	
	18	MCMA	41	1340	1344	9			2	
	18	MCMA	41	1351	1354	3			1	
	18	MCMA	41	1406	1408	4			1	
	18	MCMA	41	1435	1437	12			1	
	930	BORD	45	1625	1625.4	1	9.0	2.0		
	18	BOUL	42	2352	0012	34			3	
3	18	MCMA	41	1449	1455	8			1	
	18	MCMA	6	1747	1748	2			1	
	18	MCMA	8	1900	1900	1			1	
4	18	MCMA	41	1622	1626	6			2	
6	9240	ARCE	2	1123.7	1123.9	2.4				RECORD DIST
	2830	ARCE	1	1123.9	1124.6	1.6				
7	930	BORD	45	1010	1010.2	1	9.0	2.0		
8	4995	CANR	3	0820	0821.5	3.5	9.0	3.0		
	2695	CANR	3	0820	0822	3.5	4.0	1.0		
	1420	CANR	3	0820.5	0822.5	3.5	3.0	1.0		
	3100	CRIM	3	0926	0930	8	47.0	16.0		
	9240	ARCE	40	1347.2	1354.2	12				
	18	MCMA	41	2018	2019	5			1	
	18	MCMA	41	2030	2033	24			1	
	18	MCMA	42	2328	2330	8			2	
9	8800	MANI	4	0250.7	0251.7	2.3	41.2	9.9		
	4995	MANI	4	0250.7	0251.7	2.8	36.7	7.5		
	3750	TYKW	3	0250	0251.6	7	28.0	3.0		
	2695	MANI	4	0250.7	0251.7	2.8	23.7	7.1		
	1415	MANI	2	0251.2	0251.6	1.3	5.4	1.6		
	1000	TYKW	1	0251	0252	3	1.5	0.4		
	606	MANI	2	0251.2	0252.1	1.8	3.7	.6		
	208	VORO	6	0257	0257	4	20.0			
	1000	TYKW	40	0710.7	0713.2	4	21.0	4.0		
	9400	TYKW	1	0713	0713.3	1	5.0	2.0		
	8800	MANI	1	0713.1	0713.3	2.2	6.6	3.3		
	8800	ATHN	1	0713.2	0713.6	1.4	1.6	.3		
	6100	KISV	8	0713.9	0714.1	2	10.5			
	4995	MANI	3	0713.1	0713.3	2.2	14.1	4.7		
	4995	ATHN	3	0713.2	0713.4	2.3	10.6	2.4		
	3750	TYKW	45	0713	0713.3	2	10.0	3.0		
	2695	MANI	3	0713.1	0713.3	2.2	11.1	4.0		
	2695	ATHN	3	0713.2	0713.5	2.5	10.0	2.9		
	2000	TYKW	45	0713	0713.3	2	14.0	4.0		
	1415	MANI	2	0713.1	0713.4	2.2	9.7	4.3		
	1415	ATHN	1	0713.2	0713.6	4.4	8.9	1.9		
10	18	MCMA	42	0020	0025	27			2	
	18	MCMA	6	0115	0116	2			1	
	237	TRST	41	0946.4	0948.4	4.1	40.0			
	260	ONDR	45	0948	0948	2	15.0			
	1500	BERL	4	0951.5	0953.8	3.5	5.8	1.5		
	1415	ATHN	1	0952.6	0957.3	3.1	3.4	1.0		
	3000	BERL	1	0953.4	0953.7	.9	1.8	0.5		
	808	ONDR	45	0953	0954	2	50.0			
	536	ONDR	45	0953	0954	1.5	45.0			
	260	ONDR	45	1119	1120	8.5	30.0			
	808	ONDR	5	1341.5	1341.5	1	60.0			
	18	MCMA	41	2045	2046	2			1	
11	29	UPIC	45	1018	1018.5	1.5				
12	260	ONDR	45	1015.5	1017.5	2.5	45.0			
	260	ONDR	45	1034	1041.5	13	35.0			
	260	ONDR	45	1230	1232	4	20.0			
13	9500	BERL	20	1003	1026	97	9.2			
	1500	BERL	20	1005	1146.6	85	2.9			
	930	BORD	45	1009	1009.5	2	13.0	3.0		
	237	TRST	42	1040.7	1041.2	4.2	110.0			
	237	TRST			1043.5		87.0			
	237	TRST	41	1231	1231.6	1.5	170.0			
	18	MCMA	41	1312	1317	10			1	
14	550	KIEV	6	1112.2	1112.5	1.5	75.0			
	550	KIEV	6	1201	1201.3	1.2	45.0			
	18	MCMA	41	1548	1553	10			1	
15	208	VORO	6	0222	0222	2	30.0			
	208	VORO	6	0232	0232	2	300.0			
	200	HIRA	45	0232	0232.1	1.5	180.0D	100.0D		
	3100	CRIM	1	0948	0950	3	4.0	1.0		
	6100	KISV	6	0949	0949.8	1.8	6.0			
	260	ONDR	45	1132	1132	2.5	15.0			
	930	BORD	45	1137	1137.6	1	9.0	2.0		
	260	ONDR	8	1228	1228	2	15.0			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

FEBRUARY 1974

FEB 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
	930	BORD	45	1303	1303.9	2	8.0	2.0		
	260	ONDR	45	1303.5	1305.5	5	65.0			
	234	POTS		1304.2	1304.2	1.2	200.0	2.0		
	29	UPIC	5	1309.5	1309.5	.5				
	18	MCMA	42	1319	1418	109			2	
	3000	BERL	1	1340.3	1341	1.5	4.1	1.3		
	260	ONDR	45	1340	1341	2	25.0			
	1500	BERL	1	1341	1341.1	.5	2.7	1.2		
	930	BORD	45	1341	1341.5	1	30.0	3.0		
	536	ONDR	5	1341.5	1341.5	1.5	45.0			
	3000	BERL	1	1351.8	1352.2	.7	5.5	1.8		
	2800	OTTA	24	1420	1505	45	2.4	1.2		
	2800	OTTA	24	1505		540 D	2.4			
	35000	SGMR	3	U	1512 U	11.5D	246.0	72.0		
	15400	SGMR	3	U	1517 U	7.3D	400.0	120.0		
	2800	OTTA	4	1505	1513	14	180.0	35.0		
	10700	PENN	3	1509.2	1512.2	9	490.0	182.0		
	8800	SGMR	1	U	1518 U	9.6D	15.1	6.0		
	9400	HUAN	3	1509	1512.1	8.5	356.7	112.6		
	4995	BOUL	3	1509	1513	10	199.0	54.0		
	4995	SGMR	1	U	1517 U	8.9D	8.8	3.5		
	2830	ARCE	3	1509.6	1514.3	9.5				INTERRUPTION
	2695	BOUL	3	1509.5	1514	7.5	81.0	25.0		
	2695	SGMR	1	U	1517 U	6.4D	3.6	1.3		
	1420	BOUL	3	1509.5	1513	6.5	23.0	9.0		
	1420	KIEL	45	1510	1511	6	60.0	10.0		
	1000	KIEL	45	1510	1512	5	250.0	10.0		
	960	PENN	45		1511.8		50.0			
	930	BORD	45	1510	1512	6	81.0	6.0		
	800	KIEL	45	1510	1512	5	60.0	10.0		
	600	KIEL	45	1510	1512	5	200.0	20.0		
	400	KIEL	45	1510	1513	5	110.0	20.0		
	240	KIEL	45	1510	1511	7	600.0	20.0		
	228	HARS	45	1510.5	1511.2	4.2	100.0	15.0		
	18	MCMA	6	1510	1513	4			2	
	9400	HUAN	29	1517.5	1517.5	29	28.9	12.9		
	10700	PENN	29	1518.2	1518.2	29.6	30.7	15.3		
	2800	OTTA	1	1518	1518.7	1	2.2			
	245	SGMR	43	1518.4	1943.2	412.6D	23.0			
	2800	OTTA	29	1519	1519	50	3.0	1.5		
	930	BORD	40	1646	1647.8	3	9.0	2.0		
	2800	OTTA	27	1755		100	1.2	1.0		
	2800	OTTA	24	1755	1805	10	1.2	0.6		
	2800	OTTA	24	1805		75	1.2			
	8800	SGMR	20	1810.3	1821.9	54.3	13.2	7.9		
	2800	OTTA	46	1811	1821.7	22	17.4	4.6		
	2695	SGMR	20	1811.8	1822	15.7	16.4	9.8		
	4995	BOUL	45	1812	1813	4	14.0	5.0		
	4995	SGMR	20	1812	1822.7	22.8	15.2	9.1		
	2695	BOUL	45	1812.5	1822.5	23.5	20.0	7.0		
	1415	SGMR	20	1812.1	1821.9	24.3	7.6	4.6		
	960	PENN	40	1812		16				
	606	SGMR	46	1812.1	1815.7	19.3	12.5	6.7		
	606	SGMR	46		1817.8		22.4			
	410	SGMR	6	1812.8	1817.9	19.1	9.2	1.0		
	2800	OTTA		1813	1813.8	9	9.2			
	1420	BOUL	45	1813	1822	26.5	7.0	2.0		
	15400	SGMR	20	1816.5	1822.9	11	4.8	2.9		
	4995	BOUL	3	1819.5	1821.5	12.5	21.0	7.0		
	10700	PENN	1	1820.3	1822.3	8.8	9.1	2.9		
	2800	OTTA		1820	1821.7	13	17.4			
	2800	OTTA	26	1920	1935	15	-1.2	-0.6		
	18	BOUL	6	2023	2024	2			1	
	18	MCMA	6	2024	2026	2			2	
	2800	OTTA	32	2025	2105	140	-1.4	-0.7		
	18	MCMA	41	2311	2339	37			2	
	18	MCMA	41	2358	0001	7			2	
16	18	MCMA	41	0233	0252	54			1	
	9400	TYKW	20	0300	0310	30	5.0	2.0		
	3750	TYKW	45	0300	0306.2	20	9.0	3.0		
	2000	TYKW	20	0300	0306	20	3.0	1.0		
	8800	MANI	3	0301	0307.7	12.7	14.0	7.0		
	4995	MANI	20	0302.7	0305.8	10.5	7.7	3.8		
	2695	MANI	1	0302.7	0305.8	9.1	7.4	2.5		
	1415	MANI	1	0303.4	0306.2	9.8	2.6	1.0		
	3750	TYKW	29	0320		90	2.0	1.0		
	200	GORK	44	0543 E		377 D		5.0		
	100	GORK	44	0543 E		377		5.0		
	221	ABST	44	0700	0840	240	4.0			
	260	ONDR	40	0810	0915	400	25.0			
	245	SGMR	44	1144 E	1910.4	628 D	68.0			
	200	HIRA	44	2125 E	0315	685 D	110.0	60.0		
	100	HIRA	44	2125 E	0628	685 D	300.0	50.0		
	208	VORO	44	2300	0128	240		45.0		
	18	MCMA	41	1142	1145	8			2	
	18	MCMA	41	1201	1204	6			1	
	18	MCMA	41	1214	1219	7			1	
	18	MCMA	41	1248	1250	17			2	
	18	MCMA	42	1352	1434	120			2	

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FEB 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	113	POTS	41	1422.4	1423.6	1.2	150.0	6.0		
	2800	OTTA	21	1645	1655	40	1.2	0.6		
	2800	OTTA	1	1647	1649.2	4	1.0	0.5		
	2800	OTTA	27	1735		210	1.6			
	2800	OTTA	24	1735	1747	12	1.6			
	2695	PENT	20	1740	1747	35	1.3	0.7		
	2800	OTTA	24	1747		183	1.6			
	7000	SAOP	2	1817.9	1820.3	6.1	14.3	4.7		
	18	MCMA	6	1853	1855	2			2	
	2800	OTTA	20	1940	1950	55	1.2	0.7		
	2800	OTTA	26	2050	2105	15	-1.6	-1.0		
17	100	GORK	44	0529 E		391 D		70.0		
	200	GORK	44	0530 E		390 D		30.0		
	100	GORK	24	0623.4	0632.4	32.1	700.0	200.0		
	221	ABST	44	0700	0700	240	17.0			
	207	IZMI	44	0700		300	50.0			
	260	ONDR	44	0750	1002.5	420	50.0D			
	245	SGMR	44	1142 E	1459	631 D	39.3			
	200	HIRA	44	2125 E	2315	685 D	30.0	20.0		
	6100	KISV	6	0759.3	0815	2.5	2.5			
	113	POTS	45	0801.9	0801.9	.2	600.0	150.0		
	29	UPIC	45	0932	0933	1.5				
	29	UPIC	45	1033	1043	10.5				
	237	TRST	41	1110.3	1111.5	1.7	120.0			
	536	ONDR	5	1111.5	1111.5	1	40.0			
	29	UPIC	45	1111.5	1114	3.5				
	113	POTS	45	1112.9E	1112.9	1.5D	700.0			
	100	GORK	6	1112.1	1114.8	2.7	100.0			
	23	POTS	45	1112.8	1113.1	.9	6000.0	1000.0		
	29	UPIC	5	1123	1123.5	1				
	29	UPIC	5	1128	1128.5	1				
	29	UPIC	45	1159.5	1201	2.5				
	237	TRST	42	1349.5	1353.1	4.5	54.0			
	113	POTS	45	1353.1	1353.4	.3	560.0	80.0		
	2800	OTTA	26	1355	1555	120	-1.9	-1.0		
	245	BOUL	42	1412 E	1412	20			1	
	930	BORD	40	1455	1458.5	4	8.0	2.0		
	237	TRST	45	1458.8	1459.2	.7	210.0	63.0		
	29	UPIC	5	1518	1518	.5				
	2695	PENT	1	2248	2250	6	1.3	1.0		
18	208	VORO	6	0126	0126	1	140.0			
	208	VORO	6	0138	0138	1	70.0			
	208	VORO	6	0139	0139	1	70.0			
	208	VORO	41	0200	0200	6	45.0			
	208	VORO	41	0208	0208	2	70.0			
	200	GORK	44	0530		330 D		5.0		
	100	GORK	44	0530		330 D		5.0		
	100	HIRA	45	0547.5	0548.1	1.5	550.0	100.0		
	221	ABST	44	0700	0743	240	4.0			
	260	ONDR	44	0740	1432.5	370	50.0			
	283	DWIN	44	0840	1405	440 D	20.0	4.0		
	245	SGMR	44	1141 E	2028	633 D	184.8			
	410	SGMR	43	1758.4	1932.9	255.6D	20.2			
	200	HIRA	44	2115 E	0506	695 D	70.0	20.0		
	100	HIRA	44	2115 E	0509	695 D	40.0	15.0		
	237	TRST	41	0917.9	0918.5	1.3	120.0			
	29	UPIC	45	1101.5	1104	3.5				
	29	UPIC	45	1214	1214.5	1				
	29	UPIC	45	1258.5	1302	4				
	29	UPIC	45	1342	1343	1.5				
	2800	OTTA	24	1403						
	245	BOUL	42	1403 E	1414	80			2	
	2800	OTTA	27	1418 E		72 D	1.6			
	2800	OTTA	24	1418 E		32 D	1.6			
	2800	OTTA	26	1450	1530	40	-1.6	-0.8		
	29	UPIC	5	1454	1454.5	.5				
	245	BOUL	42	1550	1615	51			1	
	930	BORD	5	1600	1600	1	8.0	1.0		
	245	BOUL	42	1703	1713	28			1	
	2800	OTTA	67	1747.5		34.5	.6			
	8800	SGMR	4	1819.7	1820.4	2.4	36.8	11.0		
	4995	BOUL	45	1819	1820	2	14.0	6.0		
	4995	SGMR	4	1819.6	1820.6	4.6	11.3	3.4		
	2800	OTTA	2	1819.5	1820.8	2.3	9.4	4.7		
	2695	BOUL	3	1819.5	1820.5	5	13.0	4.0		
	2695	SGMR	4	1819.7	1820.8	3.1	10.1	2.0		
	1420	BOUL	8	1819	1821	3.5	50.0	18.0		
	1415	SGMR	4	1819.6	1819.7	1.7	75.4	22.6		
	606	SGMR	4	1819.5	1819.7	1.3	12.5	3.8		
	410	SGMR	6	1819.6	1820.4	3	13.9	2.8		
	245	SGMR	7	1820.2	1822.1	3.1	325.0	64.7		
	18	BOUL	6	1820	1821	2			1	
	245	BOUL	42	1821	1823	83			2	
	606	SGMR	2	1912.8	1913.8	1.3	9.5	5.7		
	410	SGMR	6	1912.6	1913.6	2.4	27.7	16.6		
	18	BOUL	6	2204	2206	3			1	
19	606	MANI	40	0417.6	0419.2	4.8	60.0	8.7		

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	1415	MANI	1	0419.1	0420.7	2.3	2.1	.5		
	260	ONDR	40	0719	1323.5	467	50 .0			
	283	DWIN	44	0735	1043	505 D	50.0	10.0		
	245	SGMR	44	1140 E	1737.5	635 D	72.2			
	23	POTS	45	0719.3	0719.4	.2	12000.0	2000.0		
	237	TRST	41	0822.1	0822.5	1	460.0			
	234	POTS	40	0822.1	0822.8	.9	250.0	5.0		
	207	IZMI	41	0822.7	0823	1.3	230.0			
	113	POTS	45	0822.4	0822.6	.6	250.0	25.0		
	113	POTS	45	0932.9	0933	.6	700.0	40.0		
	29	UPIC	5	0933	0933.5	1				
	23	POTS	45	0933	0933	.5	80000.0	1600.0		
	29	UPIC	5	1053	1053.5	.5				
	29	UPIC	5	1245.5	1246	1				
	237	TRST	42	1336.1	1337.1	1	99.0			
	29	UPIC	45	1508	1508.5	1				
	930	BORD	40	1523	1524.3	2	10.0	2.0		
	18	MCMA	6	1547	1549	3				
	606	SGMR	1	1548.9	1549.4	.7	1.3	.4	1	
	410	SGMR	6	1548.8	1549.2	1	25.8	7.7		
	245	SGMR	6	1548.6	1549.1	1.6	17.2	5.2		
	29	UPIC	45	1549	1549.5	1				
	7000	SAOP	2	1817.1	1817.2	1.1	19.3	8.9		
	15400	SGMR	3	1819.1	1819.2	1	10.5	3.2		
	9400	HUAN	20	1819	1819.6	3.4	12.4	5.0		
	8800	SGMR	4	1819.2	1819.5	3.9	22.5	6.7		
	4995	BOUL	8	1819	1819.5	2.5	26.0	9.0		
	4995	SGMR	4	1819.2	1819.5	3.5	22.3	6.7		
	2800	OTTA	3	1819.1	1819.5	3	24.6	6.2		
	2695	SGMR	3	1819.3	1819.6	3.9	24.1	7.2		
	1420	BOUL	8	1819	1820	1.5	6.0	2.0		
	1415	SGMR	2	1819.1	1819.5	4.3	7.5	2.3		
	410	SGMR	8	1819.3	1819.5	.9	2.9	.9		
	2695	BOUL	8	1820	1820.5	4.5	27.0	11.0		
	2800	OTTA	29	1822.1		21	2.2	0.8		
	18	MCMA	6	2043	2045	3				
	2800	OTTA	8	2137.1	2137.3	.5	.8	0.4	1	
20	100	HIRA	45	0458.3	0458.5	1.5	360.0	70.0		
	200	HIRA	45	0459.3	0459.6	1	100.0	50.0		
	200	HIRA	45	0534	0535.3	2	85.0	30.0		
	113	POTS	40	0658.9	0659.6	9.4	7000.0			
	100	HIRA	41	0659	0659.8	9	800.0			
	221	ABST	40	0700	0704.8	7	9.0			
	29	UPIC	45	0700	0706	7.5				
	237	TRST	42	0702.7	0702.7	3.3	74.0			
	260	ONDR	45	0900	0902.5	10	40.0			
	29	UPIC	45	0900	0903	6				
	221	ABST	6	0901.5	0902.8	2	28.0	10.0		
	930	BORD	40	0902	0903.5	2	8.0	2.0		
	237	TRST	41	0902	0903.1	1.5	160.0			
	207	IZMI	6	0902.8	0903.3	1.2	110.0	60.0		
	113	POTS	5	0918.5	0918.5	.2	280.0	90.0		
	23	POTS	45	0941	0941.2	.6	10000.0	2500.0		
	260	ONDR	45	1011.5	1012	1.5	185.0			
	221	ABST	6	1037	1037.5	2	48.0	18.0		
	260	ONDR	45	1038.5	1040	5.5	90.0			
	237	TRST	42	1038.4	1039.4	4.6	590.0			
	237	TRST			1042.1		350.0			
	234	POTS	40	1038.4	1039.4	3.7	450.0	2.0		
	113	POTS	40	1038.5	1039.4	11	900.0	20.0		
	23	POTS	40	1038.5	1039.5	11	120000.0	6000.0		
	408	TRST	42	1039	1042.1	9.8	16.0			
	207	IZMI	41	1039	1040	12	290.0			
	29	UPIC	45	1039.5		10.5				
	536	ONDR	45	1040	1041.5	10	40.0			
	237	TRST	42	1044.5	1048.5	5 D	43.0			
	207	IZMI	41	1105	1110.8	39	75.0			
	113	POTS	40	1112.4	1117.9	20	280.0	1.0		
	23	POTS	40	1112.5	1132.1	20	25000.0	400.0		
	1500	BERL	1	1113	1113.5	1	4.2	1.6		
	29	UPIC	45	1113.5	1113.5	1				
	283	DWIN	43	1115	1125	45		10.0		
	550	KIEV	3	1118.5	1126.5	8.7	73.0			
	536	ONDR	5	1120.5	1121	6	35.0			
	408	TRST	42	1120	1157.8	39	9.0			
	237	TRST	42	1125.6	1128.4	3.5	86.0			
	260	ONDR	45	1127	1129	2	60.0			
	29	UPIC	45	1127	1131.5	5				
	1500	BERL	1	1131.3	1131.4	.4	2.0			
	930	BORD	5	1153	1153.6	1	8.0	1.0		
	29	UPIC	45	1157.5	1158.5	2.5				
	23	POTS	41	1157.5	1158	2.6	55000.0	5000.0		
	3000	BERL	1	1216	1217.1	4	3.7	1.6		
	1500	BERL	1	1216.5	1217	1.3	1.6	0.6		
	29	UPIC	45	1217.5	1218.5	2				
	29	UPIC	45	1306	1308.5	3				
	23	POTS	41	1306	1307	3.2	15000.0	700.0		
	283	DWIN	45	1327	1328	4	50.0	15.0		
	3000	BERL	46	1328.5	1334.5	9.5	37.0	8.1		

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20	9500	BERL	3	1329.5	1330.7	7.5	24.0	6.9		
	9400	HUAN	20	1329.5	1331.1	3.8	273.0	143.0		
	4995	SGMR	4	1329.5	1330.8	11.4	43.5	13.1		
	2695	SGMR	4	1329.7	1331	13.9	20.4	6.2		
	1500	BERL	46	1329	1330.4	8	11.0	3.0		
	1415	SGMR	4	1329.6	1331.6	6.9	10.3	3.3		
	1000	KIEL	45	1329	1329	4				
	960	PENN		1329.2	1331.6	5	8.1	3.2		
	930	BORD	45	1329	1331.6	4	18.0	6.0		
	550	KIEV	6	1329	1332.1	5	45.0			
	410	SGMR	6	1329.5	1331.4	4.7	15.1	4.5		
	400	KIEL	45	1329	1332	6	35.0	5.0		
	245	SGMR	6	1329.9	1330.2	5.5	55.0	16.5		
	237	TRST	42	1329.8	1330.7	5	440.0			
	234	POTS	41	1329.4	1330.7	1.3	250.0	25.0		
	113	POTS	45	1329.4	1330.4	3.1	900.0	30.0		
	23	POTS	45	1329.8	1330.8	3.7	150000.0D	4000.0D		
	15400	SGMR	3	1330	1331.7	4.3	17.6	5.3		
	10700	PENN	3	1330	1331.6	6	20.0	7.0		
	9240	ARCE	3	1330.3	1331.7	3.7				
	8800	SGMR	4	1330	1331.2	10.5	26.7	8.0		
	2830	ARCE	3	1330.6	1331	2.8				
	1420	KIEL	45	1330	1332	4				
	868	ONDR	45	1330	1331.5	3	90.0			
	800	KIEL	45	1330	1331	4	40.0	10.0		
	606	SGMR	4	1330	1331.5	4.4	19.0	5.7		
	600	KIEL	45	1330	1331	4	30.0	5.0		
	536	ONDR	45	1330	1331.5	7.5	45.0			
	260	ONDR	45	1330	1330	3	65.0			
	240	KIEL	45	1330	1331	5	170.0	10.0		
	228	HARS	45	1330	1330.5	1.5	170.0	35.0		
	29	UPIC	45	1330		4.5				
	2830	ARCE	29	1333.4		13				
	2800	OTTA	51	1333 E	1334	6 D	6.6			
	9240	ARCE	29	1334		19				
	113	POTS	41	1408.5	1408.5	1.2	900.0	40.0		
	29	UPIC	45	1409.5	1409.5	1				
	7000	SAOP	4	1512	1513.2	9.5	68.5	29.3		
	283	DWIN	45	1512	1513	6	70.0D			
	10700	PENN	3	1513.9	1515	8.2	33.8	16.7		
	8800	SGMR	4	1513.7	1514.9	13.9	54.7	16.4		
	4995	BOUL	45	1513.5	1515	13	61.0	19.0		
	4995	SGMR	4	1513.6	1515.1	14.5	53.7	16.1		
	2830	ARCE	4	1513.9	1515.6	3.7				
	2800	OTTA	46	1513.7	1515.5	9.3	30.0	13.0		
	2800	OTTA		1513.7	1515.5	3.9	30.0			
	2695	SGMR	4	1513.9	1515.9	10.8	29.2	8.8		
	1415	SGMR	4	1513.9	1515.1	7	52.0	15.6		
	960	PENN	45	1513.1	1515.2	12.8	40.8	5.5		
	930	BORD	45	1513	1515.4	9	76.0	10.0		
	606	SGMR	4	1513.9	1515.4	8.7	253.6	76.1		
	410	SGMR	6	1513.9	1515.1	8.5	75.7	22.7		
	245	SGMR	7	1513.9	1514.9	9.1	455.9	136.8		
	237	TRST	41	1513.6	1514.6	2.1	2700.0			
	18	BOUL	6	1513	1515	2			1	
	15400	SGMR	3	1514.2	1514.9	7.8	19.8	5.9		
	9400	HUAN	3	1514.2	1514.4	11.2	46.4	17.0		
	9240	ARCE	4	1514.2	1515.3	4.1				
	2695	BOUL	45	1514	1516	9	33.0	11.0		
	1420	BOUL	45	1514	1515.5	7.5	40.0	11.0		
	1420	KIEL	45	1514	1515	6	160.0	20.0		
	1000	KIEL	45	1514	1515	6	95.0	15.0		
	800	KIEL	45	1514	1515	6	70.0	30.0		
	600	KIEL	45	1514	1515	6	270.0	40.0		
	400	KIEL	45	1514	1515	6	80.0	20.0		
	240	KIEL	45	1514	1515	6	1800.0	20.0		
	228	HARS	45	1514	1514.5	1.5	200.0	70.0		
	18	MCMA	6	1514	1517	6			1	
	29	UPIC	45	1515	1516	3.5				
	2830	ARCE	30	1517.6	1519.1	35 D				
	2800	OTTA		1517.6	1519	5.4	15.0			
	9240	ARCE	30	1518.3	1519.4	36				
	10700	PENN	29	1522.1	1522.1	34.5	9.7	4.8		
	2800	OTTA	29	1523		8	1.6	0.8		
	9240	ARCE	2	1542.7	1543.2	1				
	2830	ARCE	1	1543	1543.2	.9				
	4995	SGMR	1	1614.7	1614.8	.5	4.8	1.4		
	2695	SGMR	3	1614.9	1615.1	.6	17.3	5.2		
	1415	SGMR	4	1614.8	1614.9	.8	52.5	15.8		
	18	BOUL	6	1635	1637	8			1	
	2800	OTTA	21	1657	1702	15	1.6	0.8		
	930	BORD	40	1657	1701.3	10	46.0	3.0		
	4995	BOUL	3	1659.5	1700	1	9.0	3.0		
	2800	OTTA	1	1700	1700.5	1.5	5.0	2.5		
	2695	BOUL	3	1700	1701	1.5	10.0	4.0		
	1420	BOUL	8	1700	1701	1.5	8.0	2.0		
	2695	PENT	24	2319	2323	4	3.2	1.8		
	2695	BOUL	45	2320	2323.5	4	3.0	1.0		
	2695	PENT	24	2323		55 D	3.2			
	1420	BOUL	3	2324	2325.5	2.5	3.0	1.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

FEBRUARY 1974

FEB 1974	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
	▲								
	1415 MANI	2	2324.7	2325.6	2.3	2.5	1.0		
	606 MANI	40	2324.7	2325.2	2.3	65.0	9.0		
	4995 MANI	4	2357.9	0001.2	8.2	10.9	3.4		
	8800 MANI	2	2358.3	0001	4.8	7.9	3.1		
	2695 MANI	4	2358.7	0001.2	5.6	18.5	7.7		
	1415 MANI	4	2358.7	0001	5.6	10.8	4.9		
	606 MANI	4	2358.1	0001.1	4.6	18.4	6.8		
	2695 PENT	4	2359	2401.1	7	19.4	6.5		
21	606 MANI	40	0329.6	0331.7	3.1	25.0	4.5		
	1415 MANI	1	0331.6	0331.7	1.1	2.0	.5		
	283 DWIN	44	0720		540		1.0		
	237 TRST	41	0741.2	0741.6	.4	40.0			
	4995 ATHN	22	1306.3	1315.3	69 D	16.0	7.5		
	1415 ATHN	20	1307.7	1311.7	67 D	6.6	3.3		
	1500 BERL	22	1308	1312.8	92	4.2			
	2695 ATHN	20	1309.2	1315.3	66 D	7.1	2.8		
	9500 BERL	22	1310	1314.8	55	8.1			
	8800 SGMR	1	1310.6	1315.3	6.7	5.5	2.8		
	8800 ATHN	22	1310.6	1315.3	65 D	9.1	4.6		
	4995 SGMR	1	1310.6	1315.4	8.4	9.8	4.9		
	3000 BERL	22	1310	1315	95	10.0			
	2800 OTTA	27	1310		120	5.9	3.7		
	2800 OTTA	25	1310	1317	7	5.9	3.0		
	2695 SGMR	1	1310.7	1315.4	7.7	4.9	2.5		
	930 BORD	40	1310	1310.5	4	11.0	2.0		
	808 ONDR	5	1311.5	1311.5	.5	70.0			
	2800 OTTA	1	1312.5	1313.5	1.5	2.0	1.0		
	2800 OTTA	1	1314.7	1315.1	2.5	3.5	1.8		
	2800 OTTA	24	1317		55	5.9			
	9240 ARCE	21	1349	1414.1	176 U				
	260 ONDR	45	1353.5	1354.5	4	25.0			
	2830 ARCE	20	1409.8	1415.3	36				
	2800 OTTA	26	1412	1510	58	-5.9	-3.0		
	9240 ARCE	2	1512	1514.8	6				
	18 BOUL	6	1641	1643	4			1	
	18 BOUL	6	1748	1750	3			1	
	18 BOUL	6	1802	1803	2			1	
	18 BOUL	6	1810	1811	2			1	
	18 BOUL	6	1826	1827	2			1	
22	200 HIRA	45	0508	0508.7	2	135.0	40.0		
	100 HIRA	45	0508.5	0508.8	1.5	100.0	30.0		
	260 ONDR	45	0852	0852	2	15.0			
	260 ONDR	45	0920	0920	4.5	20.0			
	283 DWIN	43	0935	0952	65	3.0	1.0		
	260 ONDR	40	1010	1038	43	15.0			
	29 UPIC	45	1012.5	1014	8.5				
	2800 OTTA	22	1435	1438	21	2.2	1.1		
23	808 ONDR	45	1343.5	1343.5	4	60.0			
	3000 BERL	1	1343	1344.5	2	1.9	1.0E		
	2800 OTTA	21	1343	1350	13	.8	0.4		
	2800 OTTA	1	1343.2	1344	1	.8	0.4		
	1500 BERL	1	1343.5	1344	1.5	1.2			
	2800 OTTA	27	1445		200	1.6	1.2		
	2800 OTTA	24	1445	1545	60	1.6	0.8		
	2800 OTTA	24	1545		105	1.6			
	2800 OTTA	26	1730	1805	35	-1.6	-0.8		
	2695 PENT	2	2255.9	2257.1	2.5	5.0	1.2		
	1420 BOUL	45	2255.5	2257	1.5	17.0	7.0		
	3750 TYKW	1	2256.5	2257.2	1.5	3.0	1.0		
	2000 TYKW	45	2256	2257.2	2	12.0	3.0		
	1000 TYKW	45	2256.5	2257.2	2.5	43.0	6.0		
	2695 BOUL	8	2257	2258	1	7.0	3.0		
	3750 TYKW	1	2331	2331.5	1	1.0	0.5		
	2695 BOUL	3	2331	2332	1.5	5.0	2.0		
	2695 PENT	1	2331.2	2331.5	1.5	2.4	1.2		
	2695 MANI	1	2331.4	2331.5	.8	2.3	.8		
	2000 TYKW	1	2331	2331.5	2	4.0	1.5		
	1420 BOUL	8	2331	2331.5	1.5	6.0	2.0		
	1415 MANI	2	2331.4	2331.7	.8	7.2	2.4		
	1000 TYKW	45	2331	2331.6	2	33.0	6.0		
	606 MANI	2	2331.4	2331.5	.8	9.9	2.3		
	100 HIRA	45	2331.3	2331.4	.7	800.0	100.0		
24	260 ONDR	45	1137.5	1143.5	8	45.0			
	15400 SGMR	1	1407.1	1408.4	3.9	5.4	1.6		
	8800 SGMR	1	1407.7	1408.5	3.9	5.5	1.7		
	7000 SAOP	8	1407.2	1407.6	.5	9.8			
	4995 SGMR	4	1407.8	1408.5	5.6	11.9	3.6		
	3000 BERL	45	1407 U	1408 U	1.5U	10.0	2.8		
	2800 OTTA	2	1407.8	1408.5	1.5	7.9	3.4		
	2695 SGMR	2	1407.8	1408.5	7.4	7.6	2.3		
	1500 BERL	46	1407	1408.1	1.5	6.2	1.9		
	1415 SGMR	22	1407.5	1408.5	11.5	6.1	1.8		
	930 BORD	40	1407	1407.6	2	34.0	3.0		
	808 ONDR	45	1407.5	1407.5	1	50.0			
	606 SGMR	1	1407.7	1408.5	3.4	2.0	.6		
	2800 OTTA	29	1409.3	1409.3	10	1.2	0.6		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

FEBRUARY 1974

FEB 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	2800	OTTA	20	1430		90	1.6	1.0		
	2800	OTTA	8	1725	1725.5	.5	1.1	0.5		
25	237	TRST			0901.5		200.0			
	606	MANI	1	0247	0248.6	2.7	3.9	1.0		
	100	HIRA	45	0508.5	0509.4	1.5	90.0	30.0		
	200	HIRA	45	0509	0509.3	1	185.0	70.0		
	100	HIRA	41	0526	0526.1	3	130.0			
	200	HIRA	45	0530.5	0530.7	1	140.0	30.0		
	100	HIRA	45	0530.5	0530.7	1	400.0	100.0		
	113	POTS	40	0649.8	0650.3	2.3	600.0	12.0		
	100	HIRA	42	0649	0649.2	60	300.0			
	29	UPIC	45	0649	0650	1.5				
	23	POTS	45	0649.9	0650.3	1.1	15000.0U	2000.0		
	113	POTS	40	0737.6	0747.9	11	200.0	1.0E		
	23	POTS	40	0737.4	0748	11	20000.0U	400.0		
	29	UPIC	45	0745.5	0746	2.5				
	221	ABST	6	0812	0812.5	1.5	5.0			
	283	DWIN	45	0818	0820	3	30.0	2.0		
	29	UPIC	45	0820	0820	2				
	23	POTS	5	0820.7	0820.9	.5	12000.0	4000.0		
	260	ONDR	45	0821	0821	4.5	20.0			
	237	TRST	42	0821.5	0821.8	1.5	9.6			
	207	IZMI	41	0822	0822.6	1.5	70.0			
	113	POTS	40	0847.7	0856.2	25	40000.0U	400.0U		
	221	ABST	7	0852.8	0853.2	1	8.0	3.0		
	260	ONDR	45	0853.5	0857	20	145.0			
	237	TRST	42	0854.2	0857.1	7.9	990.0			
	234	POTS	40	0854.2	0856.1	18	1000.0	4.0		
	29	UPIC	45	0854.5		25.5				
	23	POTS	40	0854.1	0912.1	19	40000.0U	1000.0U		
	606	MANI	22	0856.8	0901.5	10.2	5.9	1.5		
	536	ONDR	45	0857	0857	1.5	35.0			
	536	ONDR	45	0901.5	0901.5	1	35.0			
	207	IZMI	41	0901.2	0902	1.5	250.0			
	283	DWIN	45	0909	0910	2	70.0D			
	237	TRST	41	0911.3	0911.4	1.4	540.0			
	221	ABST	6	0911	0911.5	1.5	5.0			
	207	IZMI	6	0912	0912.5	2	220.0	170.0		
	29	UPIC	45	1031.5	1032	1.5				
	29	UPIC	45	1105	1106	3				
	23	POTS	5	1105.2	1105.7	.9	12000.0	4000.0		
	245	SGMR	6	1347.4	1347.4	10.8	10.5	1.5		
	23	POTS	45	1348.5	1348.8	1.7	10000.0	3000.0		
	29	UPIC	45	1349	1349.5	1.5				
	8800	SGMR	1	1740.6	1740.7	.2	8.9	2.8		
	4995	SGMR	8	1740.6	1740.8	.2	14.0	4.2		
	2695	SGMR	8	1740.7	1740.7	.4	33.5	10.1		
	1415	SGMR	8	1740.6	1740.6	.3	70.0	21.0		
	2800	OTTA	1	1809.2	1811.5	4	.6	0.3		
	1420	BOUL	45	1809.5	1801	2	11.0	4.0		
	1415	SGMR	40	1810.1	1810.9	1.7	13.8	8.3		
	606	SGMR	40	1810	1810.8	1.9	145.5	87.3		
	410	SGMR	6	1810.2	1810.9	1.7	55.0	15.0		
	245	SGMR	6	1810.3	1810.9	2.9	19.9	5.0		
	2800	OTTA	8	1811	1811		.8			
	245	SGMR	6	1815.8	1817.5	5.4	22.2	5.0		
26	9400	HUAN	3	1117	1120	8	383.8	194.8		
	260	ONDR	45	1350	1432	60	20.0			
	930	BORD	45	1529	1529.6	1	9.0	2.0		
27	930	BORD	5	1316	1316.1	1	7.0	2.0		
	2800	OTTA	20	1345	1427	135	1.4	0.7		
	18	MCMA	6	1614	1615	2			1	
	2800	OTTA	20	1745	1800	65	1.4	0.7		
28	2800	OTTA	20	2018	2030	52	1.4	0.7		

Observatories:

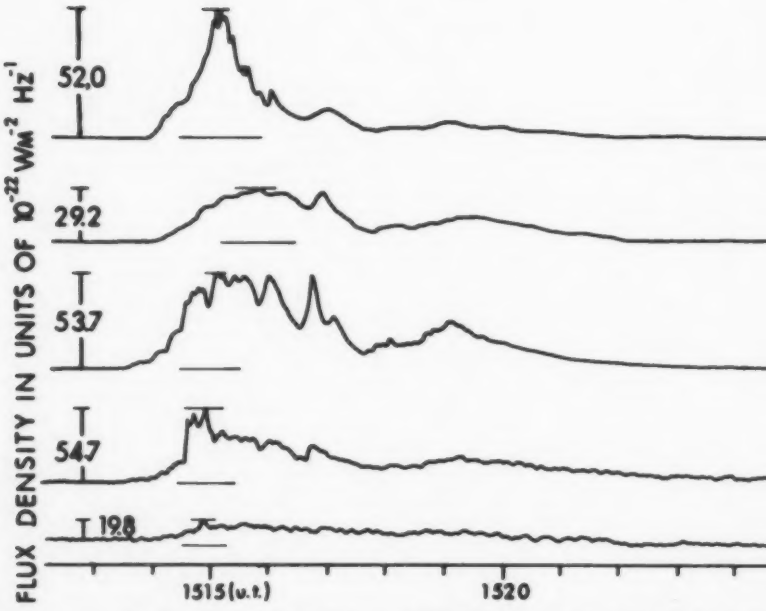
ABST = Abastumani
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CANR = Canary Islands
CRIM = Simferopol
CRON = Carnarvon
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Moscow IZMIRAN
KIEV = Kiev
KISV = Kislovodsk
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SLOU = Slough
TRST = Trieste
TYKW = Toyokawa
UPIC = Upice
VORO = Voroshilov

Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

SELECTED SOLA

20 FEBR



RADIO BURST OBSERVED 20 FEBRUARY,

AT SAGAMORE HILL RADIO OBSERVATO

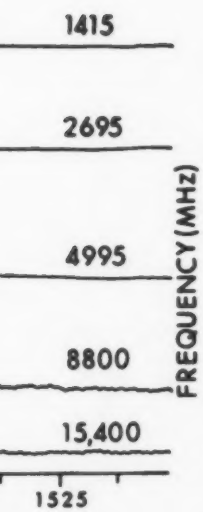
HAMILTON, MASS.

(BURST ACCOMPANIED BY TYPE IV DEKAMETER EVENT

LAR NOISE BURST

BRUARY 1974

20 Feb 74



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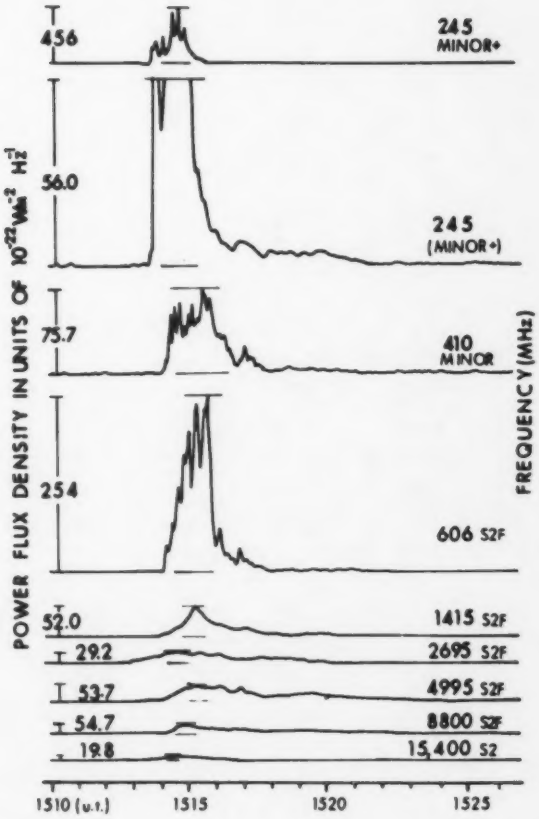

JANUARY 1974 DATA

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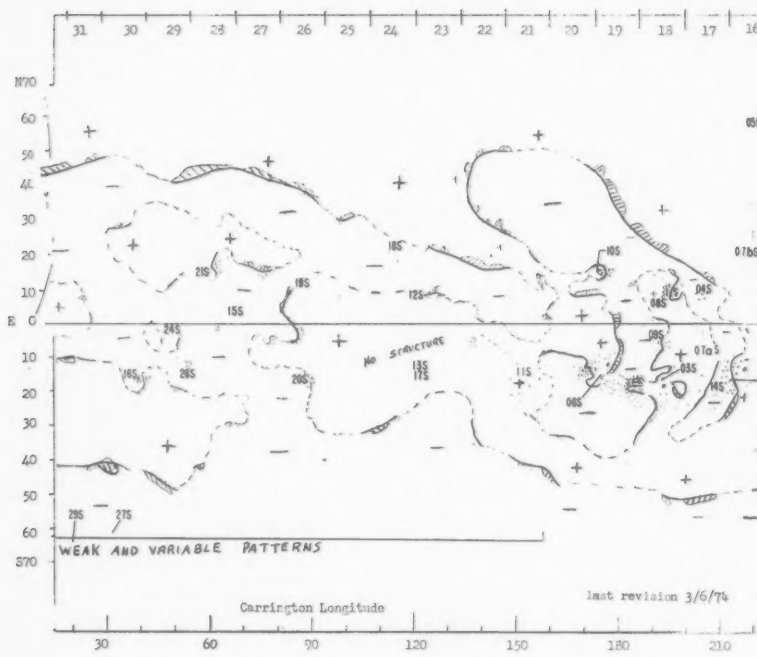
For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

ABBREVIATED CA

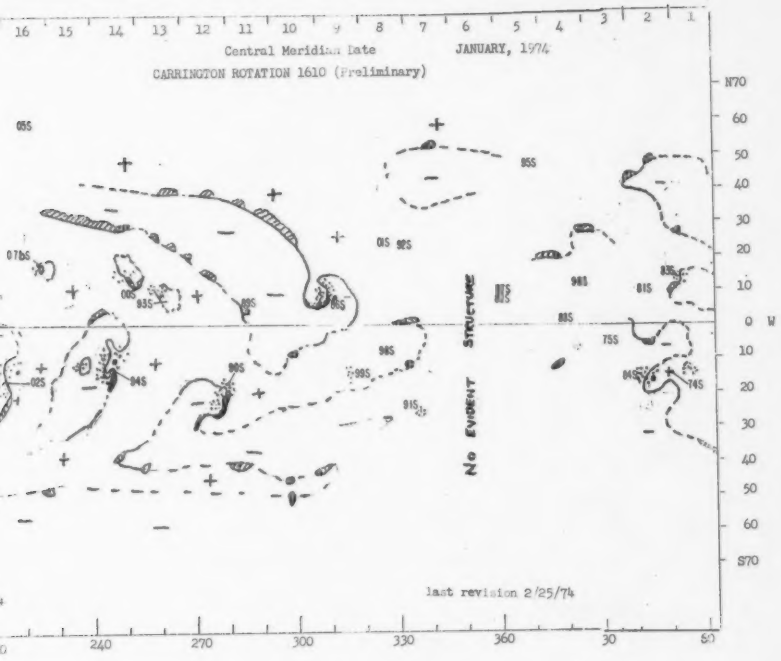
JANUAR

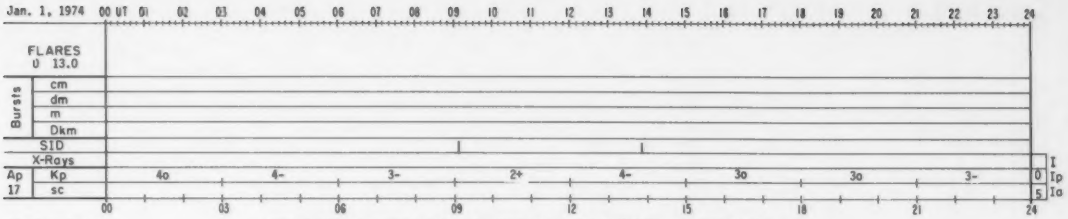


22
Jan 74

CALENDAR RECORD

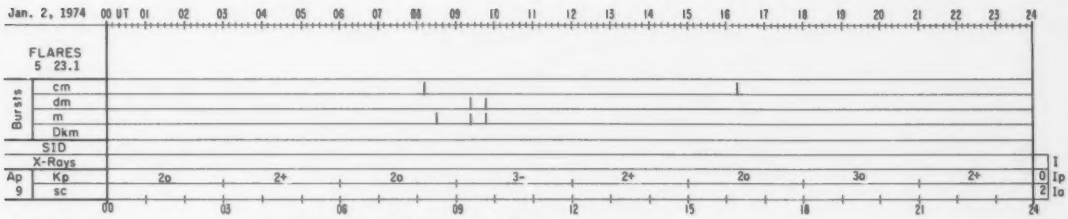
UARY 1974





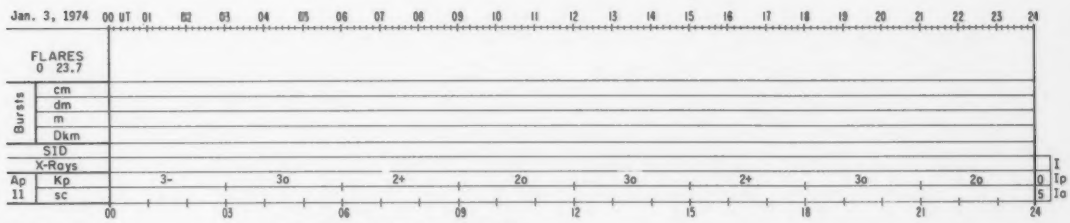
74 10 cm flux
18 Rz
CMP 12683 N14

Auroral glow seen over southern Scotland at ϕ = 58° 0120-0140; no coronal data 7 days earlier on E. limb nor 7 days later on W. limb.



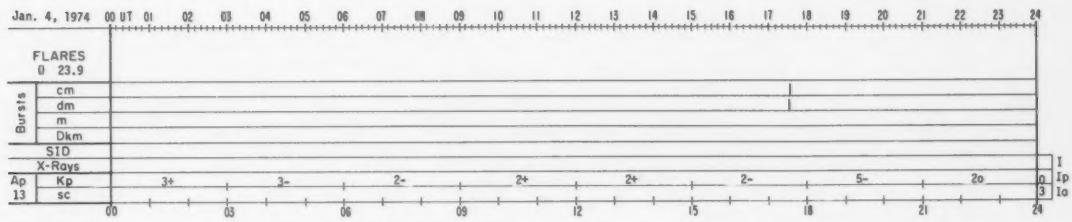
76 10 cm flux
15 Rz
CMP 12674 S15
(12681) N10
12684 S15 19310 S15 (βp)3

No coronal data 7 days later on W. limb.



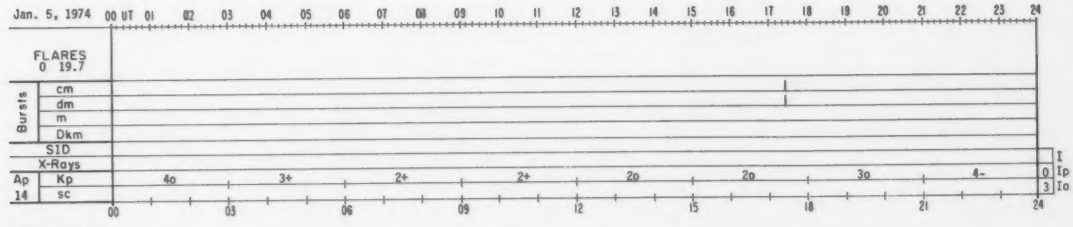
76 10 cm flux
13 Rz
CMP (12675) S07

No coronal data 7 days later on W. limb.

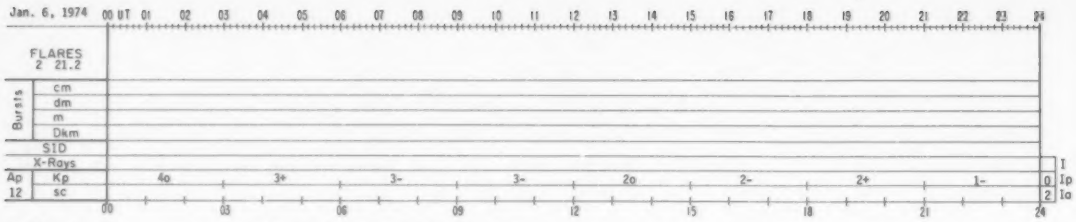


75 10 cm flux
12 Rz
CMP (12696) N11
(12688) N01

No coronal data 7 days later on W. limb.

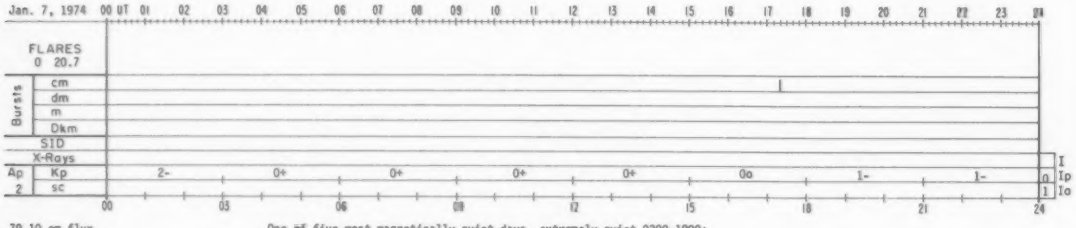


75 10 cm flux
8 Rz
CMP (12695) N47
(12697) N10
(12682) N08



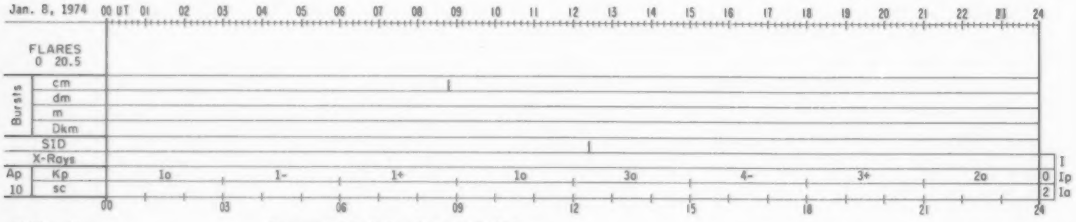
77 10 cm flux
0 Rz

No coronal data 7 days later on W. limb.



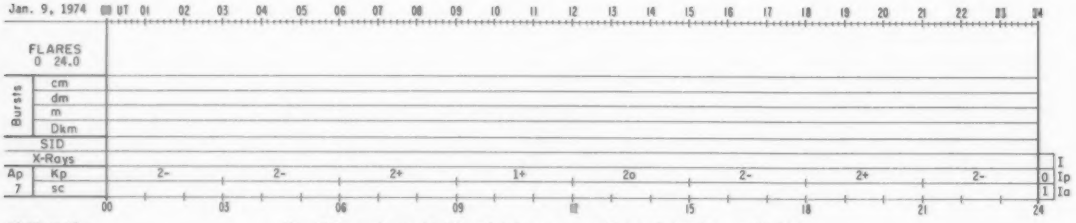
79 10 cm flux
0 Rz
CMP 12691 S23

One of five most magnetically quiet days, extremely quiet 0300-1800;
no coronal data 7 days later on W. limb.



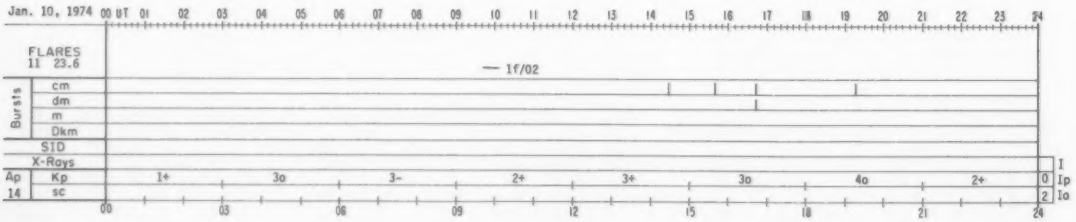
82 10 cm flux
29 Rz
CMP 12692 N23
12698 S07
(12701) N24

No coronal data 7 days later on W. limb.

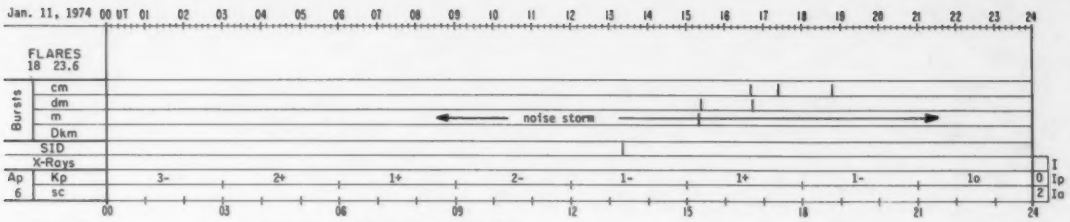


88 10 cm flux
3% Rz
CMP (12699) S14
12686 N08 (2) (19311) N07 (βp)4

One of ten most magnetically quiet days; no coronal data 7 days later on W. limb.

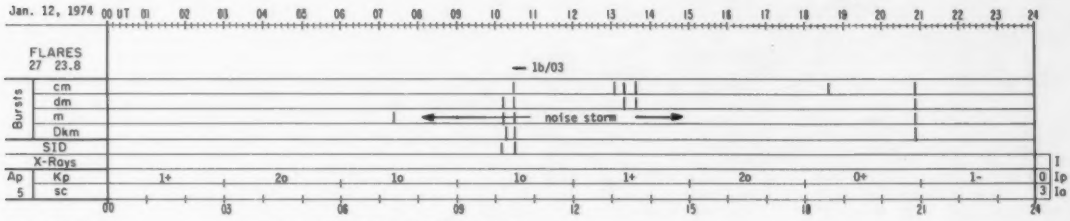


92 10 cm flux
4% Rz



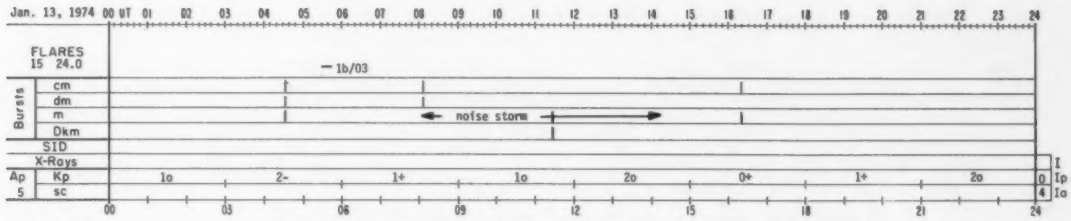
94 10 cm flux
49 Rz
CMP (12689) N06

One of ten most magnetically quiet days.



98 10 cm flux
60 Rz
CMP 12690 S18

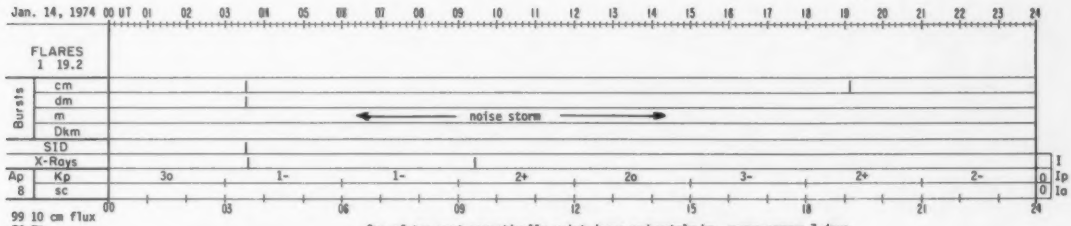
One of five most magnetically quiet days.



98 10 cm flux
45 Rz
CMP (12693) N08

N02 (no obs. Mt. Wilson)

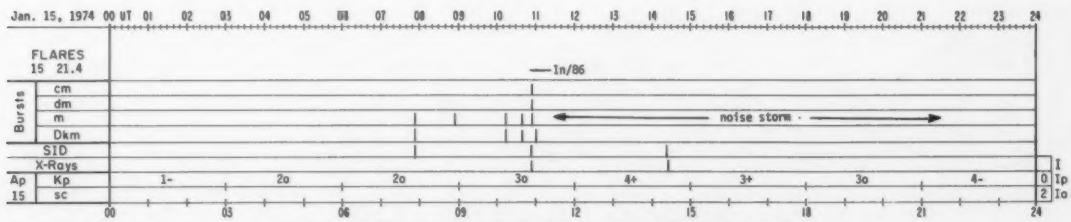
One of ten most magnetically quiet days; moderately br. green corona 7 days earlier on SE limb.



99 10 cm flux
74 Rz
CMP 12700 N10

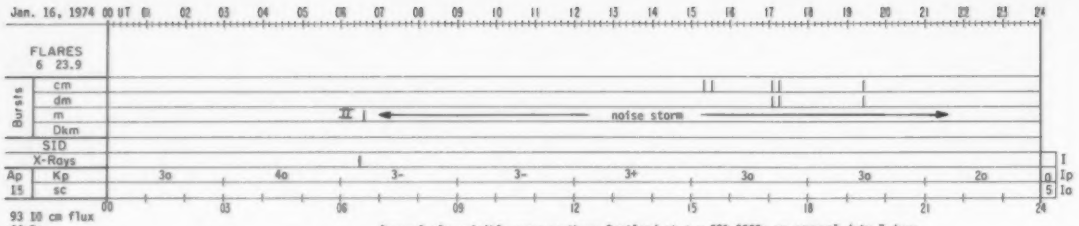
N11 (no obs. Mt. Wilson)
19318 N09 (βf)3 CMP Jan. 13
12694 S11 (3) 19312 S11 (βp)5
(19323) S11 (βp)3 CMP Jan. 15
(19324) S15

One of ten most magnetically quiet days; moderately br. green corona 7 days earlier on SE limb, very br. green corona 7 days later on SW limb.



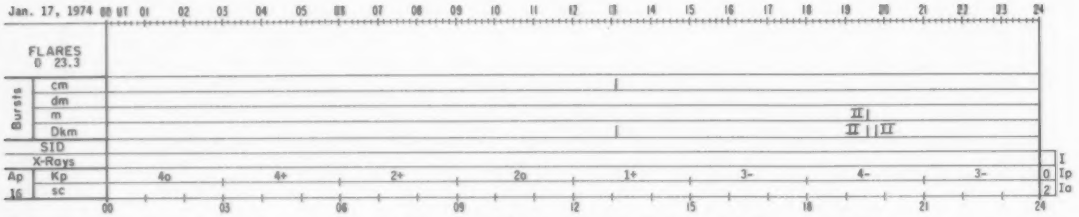
95 10 cm flux
77 Rz

Auroral glow visible over southern Scotland at ϕ = 58° 2100-2400; no coronal data 7 days earlier on E. limb, very br. green corona 7 days later on SW limb.



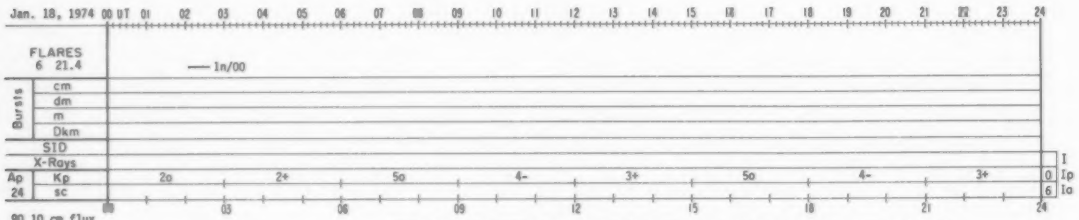
93 10 cm flux
64 Rz
CMP (12707 B) N17 N17 (no obs. Mt. Wilson)
(12705) N59
12702 S16 (2) 19313 S16 (αp)3

Auroral glow visible over southern Scotland at ϕ = 58° 0000; no coronal data 7 days earlier on E. limb, very br. green corona 7 days later on SW limb and moderately br. green corona 7 days later on NW limb.



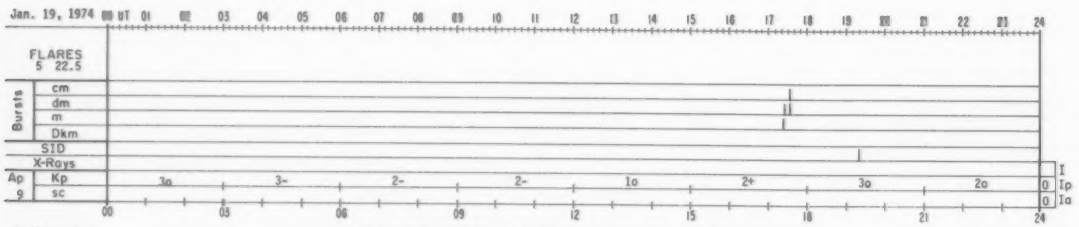
92 10 cm flux
65 Rz
CMP (12714) S16
(12707 A) S08 (19316) S09 (αp)1 CMP Jan. 18
12704 N09 (3) N06

Auroral glow visible over southern Scotland at ϕ = 58° 0000; no coronal data 7 days earlier on E. limb nor 7 days later on W. limb.



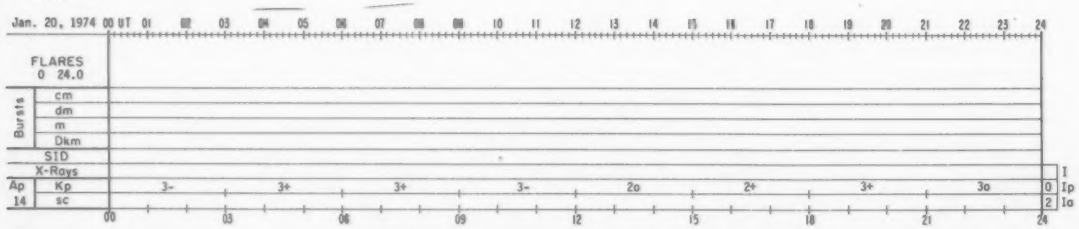
90 10 cm flux
52 Rz
CMP (12708) N06 (19325) N06 βp
12703 S17 (2) 19314 S16 (αf)2
19315 S18 (αp)4
(19326) S17 β CMP Jan. 19
(12709) S05 (19320) S06 (β) 1

One of five most magnetically disturbed days; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



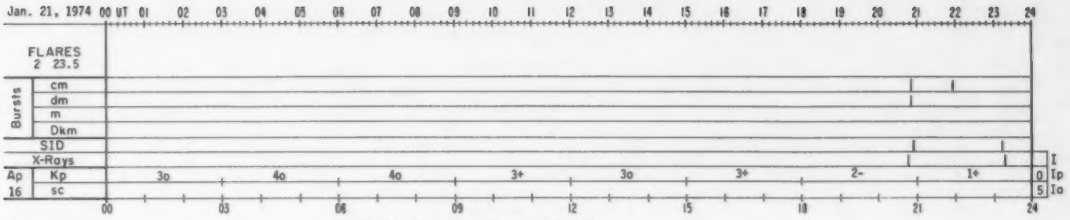
89 10 cm flux
58 Rz
CMP 12706 S15 19317 S11 αp
(19319) S19 (α)1
19321 S16 (βp)2 CMP Jan. 20
12710 N15

One of ten most magnetically quiet days; moderately br. green corona 7 days earlier on SE limb.



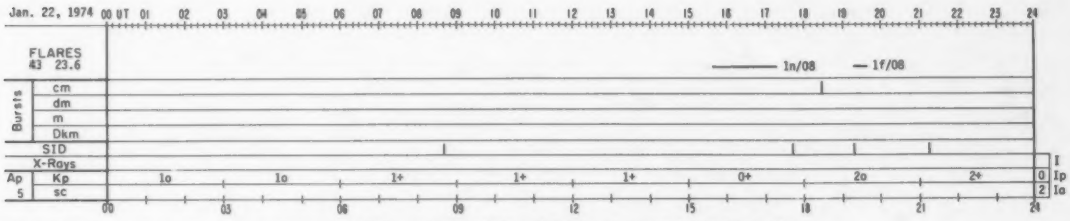
87 10 cm flux
49 Rz

No coronal data 7 days earlier on E. limb nor 7 days later on W. limb.



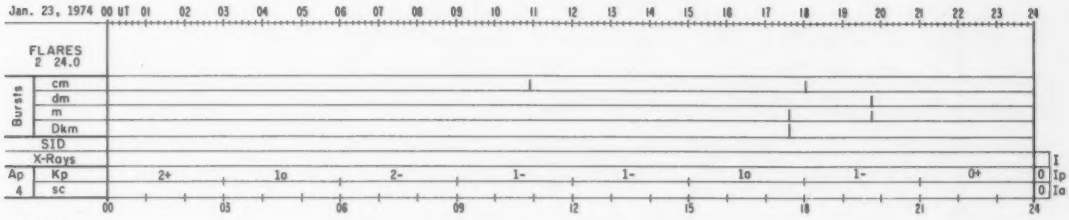
82 10 cm flux
37 Rz
CMP 12711 S13 (3) (19322) S16 (αp)1

No coronal data 7 days earlier on E. limb.



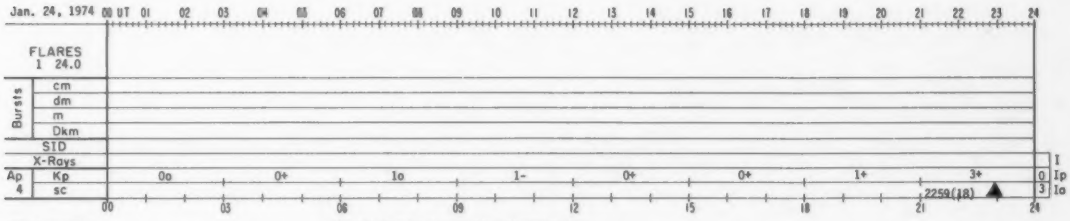
86 10 cm flux
16 Rz

One of five most magnetically quiet days; no coronal data 7 days earlier on E. limb nor 7 days later on W. limb.



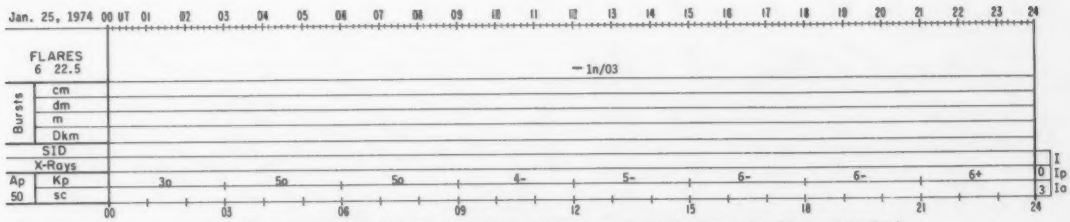
84 10 cm flux
28 Rz
CMP (12712) N09
(12713) S12
(12717) S15

One of five most magnetically quiet days; no coronal data 7 days earlier on E. limb.



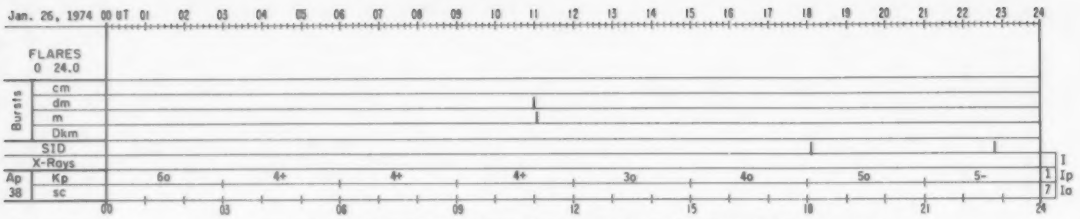
80 10 cm flux
16 Rz
CMP (12718) N22

One of five most magnetically quiet days.



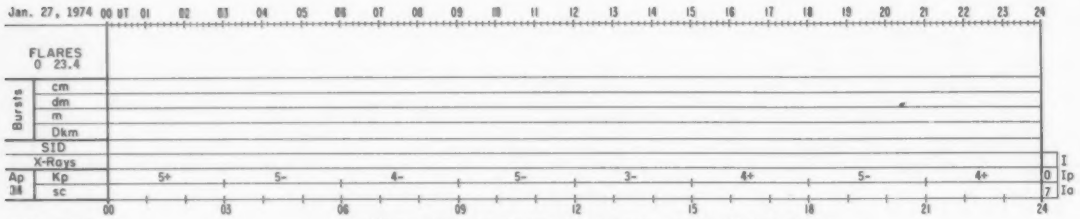
76 10 cm flux
0 Rz

One of five most magnetically disturbed days with moderate storm 0300-2400 after sc Jan. 24; aurora overhead over USSR at ϕ = 57° 1100-1200, 1600 and 1700-1800, auroral glow visible over central Scotland at ϕ = 60° 0350-0600, auroral rays were visible to zenith over British Isles and eastern Atlantic at ϕ = 63° 1800-0015 with multiple homogeneous and rayed bands estimated overhead at ϕ = 63°-67° and were seen as glow at ϕ = 58° 2045-2400 and at ϕ = 56° 2400, rays were visible at ϕ = 58° 2125; no coronal data 7 days later on W. limb.



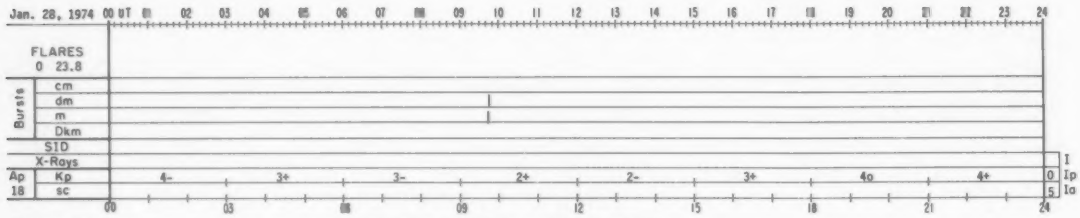
74 10 cm flux
8 Rz
CMP 12720 S16 S17
12719 N11

One of five most magnetically disturbed days with moderate activity continuing; aurora overhead over USSR at ϕ = 57° 1200-1400, ϕ = 58° 1500, ϕ = 60° 1800-1900 and 2000, auroral rays were visible to zenith over British Isles and eastern Atlantic at ϕ = 63° 0000-0015.



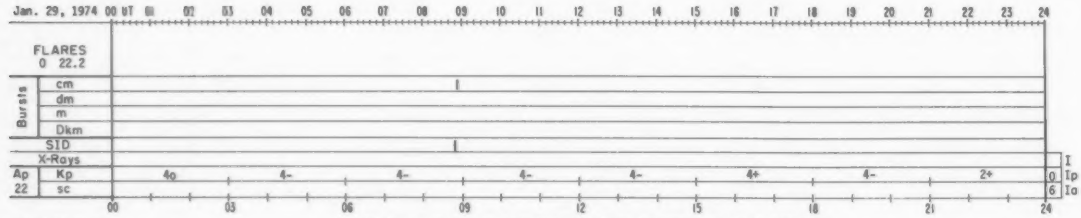
73 10 cm flux
0 Rz

One of five most magnetically disturbed days with moderate activity continuing, aurora overhead over USSR at ϕ = 57° 0900-1100 and ϕ = 58° 2000-2100 and 2400, auroral glow visible thru clouds over British Isles and eastern Atlantic at ϕ = 59° 0245.



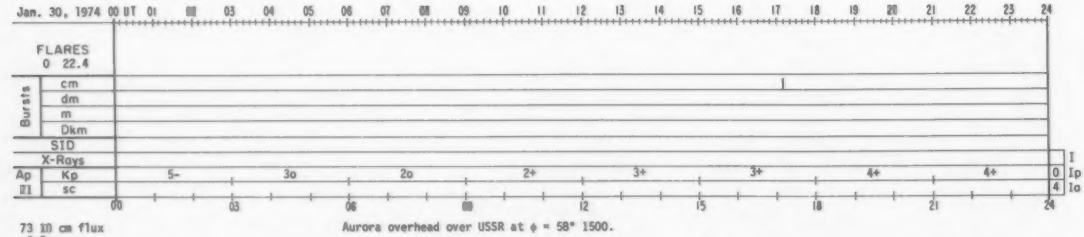
73 10 cm flux
8 Rz
CMP (12715) N03
(12721) N15

Aurora overhead over USSR at ϕ = 59° 1800 and 2100.



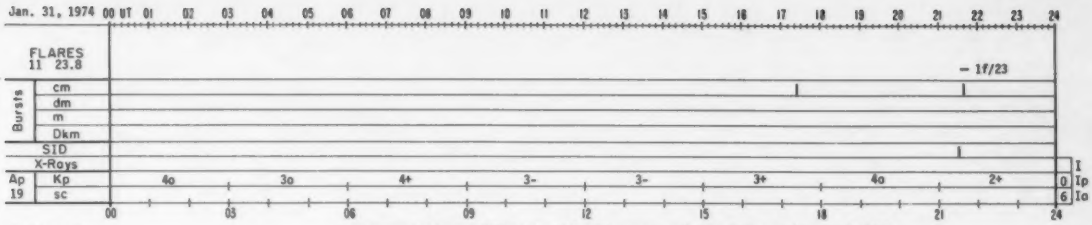
73 10 cm flux
7 Rz
CMP (12726) S15
(12724) S02 (19327) S02 (Bp)3

One of five most magnetically disturbed days with moderate activity to 2100, aurora overhead over USSR at ϕ = 59° 1300-1500 and 1800, and ϕ = 57° 1600.



73 10 cm flux
0 Rz
CMP 12716 S15 (2)
(12727) S62

Aurora overhead over USSR at ϕ = 58° 1500.



73 10 cm flux
0 Rz
CMP (12729) S65

Aurora overhead over USSR at ϕ = 59° 1500, no coronal data 7 days earlier on E. limb, nor 7 days later on W. limb.

REGIONAL FLARE INDEX

JANUARY 1974

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
12684	S16	74/01/02.6	74/01/02	74/01/06	7.17	1.43	2
12686	N 8	74/01/09.7	74/01/11	74/01/15	33.01	6.60	5
12700	N 4	74/01/14.1	74/01/18	74/01/18	5.84	5.84	1
12702	S15	74/01/16.9	74/01/10	74/01/12	28.83	9.61	5
12708	N 6	74/01/18.4	74/01/21	74/01/23	45.49	15.16	10
12703	S18	74/01/18.5	74/01/12	74/01/25	34.45	2.40	6
12710	N15	74/01/19.8	74/01/23	74/01/23	1.07	1.07	1
12706	S14	74/01/19.8	74/01/15	74/01/16	9.66	4.83	2

Note:
The Regional Flare Index and count of flares in each region has in previous months included each maximum of a multi-maximum event. This has caused some regions to appear to be more flare producing than is probably warranted. Beginning with April 1972 only the principal maximum of a multi-maximum event will be used in the calculation. Also note that only the Confirmed Events as selected for the "I.A.U. Quarterly Bulletin on Solar Activity" are included in the calculation.

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no confirmed flares during its disk passage.

MISCELLANEOUS DATA

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43 cm East-West Solar Scans - Fleurs -- June 1974	33

For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

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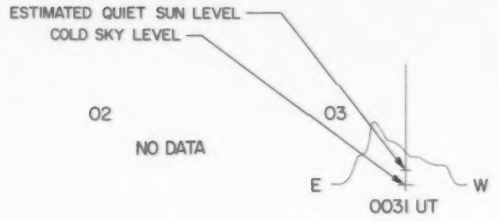
Misc
Jun 74

EAST-WEST SOLAR SCANS

JUNE 1974

Fleurs, Australia

21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



01 NO DATA

02 NO DATA

03
E W
0031 UT

04
E W
0022 UT

05 NO DATA

06
E W
0027 UT

07
E W
0022 UT

08 NO DATA

09 NO DATA

10
E W
0018 UT

11
E W
0018 UT

12
E W
0028 UT

13
E W
0018 UT

14
E W
0019 UT

15 NO DATA

16 NO DATA

17 NO DATA

18
E W
0019 UT

19
E W
0024 UT

20 NO DATA

21
E W
0029 UT

21
E W
2356 UT

23
E W
0034 UT

24
E W
0030 UT

25
E W
0030 UT

26 NO DATA

27
E W
0058 UT

28
E W
0021 UT

29
E W
0030 UT

30
E W
0030 UT

EAST-WEST SOLAR SCANS

JUNE 1974

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

43 cm
Fan-Beam with 4 minutes of arc
E-W Resolution

01

02

NO DATA 1-10, 13, 15, 16 JUNE

03

04

05

06

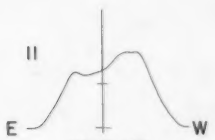
07

08

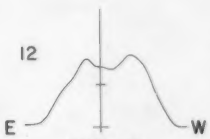
09

10

11

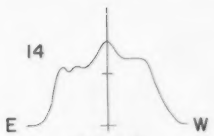


12



13

14



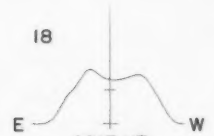
15

16

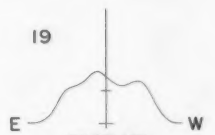
17

NO DATA 17, 20, 25-30 JUNE

18



19



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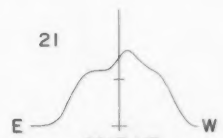
21



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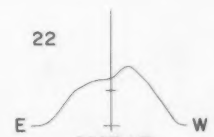
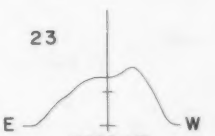


23



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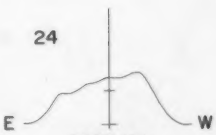

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UAG-12 "Solar-Geophysical Activity Associated with the Major Geomagnetic Storm of March 8, 1970", Parts 1, 2 and 3, compiled by J. Virginia Lincoln and Dale B. Bucknam, World Data Center A, Upper Atmosphere Geophysics, NOAA, April 1971, 466 pages, price (includes Parts 1-3) $3.00.

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UAG-25 "Observations of Jupiter's Sporadic Radio Emission in the Range 7.6-41 MHz, 9 September 1968 through 9 December 1971", by James W. Warwick, George A. Dulk and David G. Swann, Department of Astro-Geophysics, University of Colorado, February 1973, 35 pages, price 35 cents.

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